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ABSTRACT

Addressing the question of why some children manage to continue successfully through the later stages of literacy acquisition while others are unable to meet the challenges presented by fourth and fifth grade reading tasks, an 18-month, in-depth study was conducted of the home environment factors influencing the reading comprehension of second, fourth, and sixth grade students. Analysis of the data, based on interviews with family members, students' reading scores, and in-class observations of student behavior, indicated that word recognition and vocabulary were influenced by the cognitively enriching activities some homes provide, and related strongly with children's time with adults rather than with other children or watching television. Reading comprehension, though not unaffected, was less powerfully dependent on such enrichment, but was related to the emotional climate in the home. More than word recognition or vocabulary development, reading comprehension appeared to require complementary supports from home and school--the positive self-concept that develops in an emotionally positive home and the direct instruction and skill practice offered by the school. The emotional climate of the home also related closely to the students' word production in writing tasks. (MM)

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FAMILIES AND LITERACY:

The Contribution of Out-of-School Experiences to Children's Acquisition of Literacy

A Final Report to the National Institute of Education

Jeanne Chall and Catherine Snow, principal investigators

Wendy Barnes, Jean Chandler, Irene Goodman, Lowry Hemphill, and Vicki Jacobs, co-authors

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22 December 1982

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Any project of the scope and complexity of this one is possible only because of remarkable levels of personal commitment from the people who have worked on it. We would like to document here our debt to many of those people:

Wendy Barnes, Jean Chandler, Irene Goodman, Lowry Hemphill, and Vicki Jacobs are, in all senses of the word, collaborators on this report. They contributed to its content and to its form, and in the process reminded us that the great privilege of teachers is the opportunity to learn from their students. In addition to the above-mentioned five, who stayed with the project through to its long-awaited conclusion, the following students at the Harvard Graduate School of Education worked on the project in its various phases, and all made a real contribution to its success: Dianne Argyris, Luke Baldwin, John Clarke, Rosalind Davidson, James Day, Barbara Eckhoff, Michele Foster, Beverly Goldfield, Jan Hirshberg, Maggie Orr, Steven Stahl, and Judith Zorfass. Their specific contributions and those of others who have worked on the project are documented on the next page.

Among our faculty colleagues whose contribution to the research is identifiable, and ignoring the many whose intellectual stimulation and friendship have made a difference, we must mention Courtney Cazden, who directed the collection of data on classrooms, Carol Chomsky, who devised the language tests and their analysis, Marcus Lieberman, who was responsible for all the data analysis and who remained inexplicably cheerful and helpful through many frustrations, and Debbie Belle, who generously shared ideas, interview schedules, hypotheses, and encouragement with us during the early phases of the project, and who devised the figure we present in Chapter 1 of the report.

Throughout the course of the research, our lives were made easier by the cooperation of the Norwich School System, especially its Director of Primary Education, as well as the principals of the schools where we observed, the clerks and secretaries in those schools who facilitated our access to school records, and most importantly the classroom teachers who tolerated our presence in their classes, answered our questions, filled in our forms, and demonstrated by their actions their level of commitment to the education of their students. We cannot mention any of these people by name, but our thanks are no less sincere for being anonymous.

The families involved in the study welcomed us into their homes, answered our often impertinent or irrelevant-seeming questions, shared with us their views on television, on education, on teachers, on reading, on children's development, and occasionally even fed us tuna fish sandwiches. In most cases their lives offered them little leisure, yet they made time for us. We thank them.

During the final and frantic weeks of preparing this report, innumerable pages were typed and retyped, sentences rewritten, errors corrected, photocopies made, and tempers soothed by Jane Arnold, Ann Cura, and Joan Dolamore. We can only hope that the cartoon Jane has hanging on her bulletin board , showing a Simon Legree figure cracking a whip at the typing pool while singing 'Happy National Secretary's Day to you...' does not reflect their true feelings about us.

C.E.S.
J.C.

All names of places, schools, and people are pseudonyms.

Project Personnel

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Polly Wheeler	interview development, child interviewing, administratio
Judith Zorfass	selection testing, reading-testing, reading data analysi

A Note on Confidentiality

Throughout this report we present case studies of families and descriptions of classrooms and schools. The names of all individuals mentioned have been changed, as have the names of the schools of the town where the research was carried out. Identifying features of the families and the classrooms have also been deleted or changed to protect their confidentiality, but so as to preserve information about the dimensions our data suggest make a difference.

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Chapter 1: The Role of Families in Children's Literacy

A major problem confronting educators is the decline in the acquisition of literacy after about fourth grade. Whereas the National Assessment shows an increase in the late 1970's in reading achievement in grades 1-4, reading achievement in the higher grades has either not improved or has clearly declined (Chall Testimony, 1979). Over the past 15 years, verbal abilities of college entrants have also declined, as measured by the Scholastic Aptitude Test (Wirtz, 1977*). Mary Berry, Assistant Secretary for Education, summarized the findings in 1977, "Our research tells us that 9-year-olds are reading better than ever. But after that point—at about fourth or fifth grade--we see test scores begin to drop". This drop constitutes a major problem for society as a whole, since it results in upper elementary and high school students who cannot read well enough to succeed in learning the content presented in social studies, science, career education, and the like. High school graduates who read at a fifth grade level are not equipped to hold the white collar jobs which constitute an increasing proportion of employment opportunities. Furthermore, the difference in reading and related school achievement between children of high and low income families becomes even greater beginning with the 4th grade than it was in the primary grades. Thus, the children of low income families are especially vulnerable to academic failure beginning with the middle and upper elementary grades and continuing through high school and college. Confirming data on the increasing decline with increasing age among low income children is found in such standard works as Coleman _et al_ (1966) when comparisons are made with middle and high income children or with national norms.

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*It should be noted that the SAT Verbal Scores ceased to decline in 1981.

Informal opinion tends to view the children's home environment as playing an important role in determining school success - including success at reading. In order to explain the widespread failure among upper elementary school children in continuing to improve their reading skills, then, it seems that one should look to the children's homes. The most robust support for the position that home factors play a role in reading failure comes from the findings of social class differences in reading achievement and in other aspects of school success (see, for example, NAEP reports, IEA reports).

Whereas social class differences in reading achievement pose an interesting and important question about the role of home factors in school success, they do not provide sufficient knowledge of how the home works to affect achievement. What is needed is knowledge about the process by which middle-class parents support or facilitate their children's school skills and development of literacy. Furthermore, summary statistics on social class differences lead us to overlook the existence of perhaps the most interesting group of children in our schools - working-class children who succeed in achieving high levels of literacy. A recent analysis of the reading achievement of a group of working-class boys found many to be achieving at a very high level (Durkin, 1982). The study reported here also attempted to account for the sources of such children's reading success by comparing them to working-class children who were performing below average in reading and related skills.

Of potentially equal and perhaps, in some cases, greater influence than the home on reading achievement are school experiences, particularly those provided by the teacher methods, time allotments for different reading activities, and the like. Thus, although the major thrust of the research reported here was to study the effects of the home on reading, writing and related language skills, we also made classroom observations, interviewed teachers, and related these to the children's achievement.

That classroom effects on literacy may have essential importance on reading achievement has been found recently in the studies of time on task and structure by many researchers. See, for example, Rosenshine (1978), and Stallings (1977). Coleman (1966) is particularly relevant for broader school effects.

An aspect of reading failure that may offer special insights into the role of home factors in reading success is the increased risk for failure beginning at about fourth grade. The word "reading" refers to a variety of related but distinguishable activities - activities which change dramatically with development. The reading task changes during the child's elementary school years from one of decoding single words or short sentences in grade one, to one of acquiring new information from long, decontextualized, and complex passages of text in the upper elementary grades. It seems clear, though it has not previously been explicitly acknowledged, that the factors in the home environment that provide optimal support and facilitation at one stage of reading development may be irrelevant or even harmful at a later stage of reading. Thus, any search for the role of home factors in reading success must have a developmental component. The research presented here emerges from a specific model of the nature of developmental changes in reading--Chall's stage theory of reading (1979, 1983).

Stages in the development of reading

The notion of stages in reading development is a crucial theoretical assumption for the study proposed here, because the nature of the optimal home environment and family support is different for children in different stages of reading. For the present study, we will use the notion of reading stages as developed by Chall (1979).

Essentially, the reading stages of Chall are similar to Piaget's stages of cognitive development, the stages having:

> ...a definite structure that differ from one another in characteristic, qualitative ways, and that generally follow a hierarchical progression....
>
> The successive stages are characterized by growth in the ability to read language of greater complexity, rarity, technicality and abstractness, and by changes in how such printed language is viewed and used....
>
> At each stage, readers show characteristics that, if continued too long, may prevent the development of the next stage. Thus, if the accuracy and analysis (and synthesis) needed during the decoding stage (Stage 1) are not succeeded by reading experiences that require a faster pace and a greater reliance on context (Stage 2 - Confirmation), there may be a holding on to the success of the earlier stage. Similarly, if the child is not challenged with the demands of accuracy in gaining new information, as required by Stage 3, he or she may persist in the less accurate, more contextual reading of Stage 2.
>
> Reading has an affective component. The child's attitudes toward reading are related to those of his or her family, culture, and school.... (Chall, 1979, p 36-37)

A brief description of the reading stages is presented here (see Chall, 1979, for a more complete discussion):

Stage 0. Prereading.

Before entering school the child gradually becomes aware of the relationship between print and speech, and becomes increasingly attentive to print and cognizant of the meaning potential of print.

Stage 1. Initial Reading or Decoding, normally achieved in Grades 1 to 2; Ages 6-7.

> The essential aspect of Stage 1 is learning the arbitrary set of letters and associating these with the corresponding parts of spoken words.... The qualitative change that occurs at the end of this stage is the insight gained about the nature of the spelling system of the particular alphabetic language used.

Stage 2. Confirmation, Fluency, and Ungluing from print: Grades 2-3; Ages 7-8.

> ...Reading in Stage 2 is a consolidation of what was learned in Stage 1 through reading what is familiar and already known.... Since the content of what is read at this stage is basically familiar, the reader's attention can be concentrated on the printed words, usually the most common high frequency words.

Stage 3. Reading for Learning the New - Generally from One Viewpoint: Grades 4-8 ; Ages 9-13.

The Stage 3 reader can read material which is generally unfamiliar for information and/or recreation.

> In a sense, entering Stage 3 fits the traditional conception of the difference between primary and later schooling: in the primary grades, children learn to read; in the higher grades, they read to learn.

Stage 4. Multiple Viewpoints: High School, Ages 14-18.

This stage is characterized by the ability to deal with different viewpoints and is most typical of reading at the high school level.

Stage 5. A World View: College level.

This stage is characterized by independence and selectivity in use of print for one's own needs and purposes (Chall, 1979, 39-44).

The stage theory of reading development briefly presented above has relevance particularly for understanding lower achievement in reading and literacy found typically among children from low-income families as compared to children from the middle class. For low-income children as compared to children from middle class homes, while discrepancies have been reported at the pre-reading and beginning reading stages, they seem to grow wider during Stage 2, perhaps partly because fewer books are available to them (Chomsky, 1972). By Stage 3, the gap seems to widen even more, since the ability to read for information, knowledge and pleasure assume a broad vocabulary, much previous knowledge, and high skills in decoding and fluency.

Within the context of the stage theory of reading, the child's development of literacy can be seen as starting with language acquisition, continuing through the pre-reading stage, a period of growing metalinguistic awareness and interest in language and symbols as objects of play and reflection, then through the stages of decoding (Stage 1), confirmation (Stage 2), and literacy for learning (Stage 3), on to the more mature uses of literacy more typical of high school and college reading. Obviously, at each of these several stages, the child's out-of-school environment can contribute to or hinder his acquisition of the necessary skills and insights. Considerable work has been done, in fact, on the role of the child's family environment and social interaction in facilitating the acquisition of language, and in facilitating the acquisition of the beginning stage of reading--decoding. The study reported here can be seen as the logical continuation of those two areas of research: the role of the family and the child's non-school environment in facilitating the development of reading and related literacy skills for purposes of gathering information and gaining pleasure, typical of intermediate grade children.

Home Influences on Successful Literacy Acquisition

The study presented here addressed the question of why some children, even children from low-income families, manage to continue successfully through the later stages of literacy acquisition*, whereas others are unable to meet the increased challenges presented by fourth and fifth grade reading tasks. The hypothesis to be tested is that the child's out-of-school learning experiences contribute indispensably to his acquisition of stages 2 and 3 in learning to read (Chall, 1979): the acquisition of fluent reading (stage 2) and reading for information (stage 3). It is assumed that the learner's home environment and out-of-school experiences may be less important in the acquisition of stage 1 of reading, decoding, since this depends much less on knowledge of the world and use of contextual information. Decoding is a complex, but circumscribed, skill, which can be learned entirely in a school context. Reading for information, on the other hand, is a much less specific and easily taught skill; it depends to a greater extent on motivation, knowledge about the material to be read, meanings of words of a more abstract and literacy nature, use of context, and other skills which cannot be simply taught or easily practiced.

Understanding the role of the child's home environment and interaction with his family in facilitating his success at the more mature stages of reading acquisition requires forming a multi-facted picture of a) the child's out-of-school activities and interests, and b) his access to interactions with adults who can increase his knowledge of the world and model the use of reading as a source of pleasure and knowledge.

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*'Literacy' is used in this report to refer to reading plus the related skills (writing, vocabulary knowledge, metalinguistic ability) that are crucial to much of school learning. It is often used interchangeably with the more circumscribed term 'reading', since reading is the best researched and operationalized component of literacy.

The patterns of social class differences in school success and reading acquisition clearly indicate that children from higher-income families have, in general, more access to the experiences and interactions which promote the acquisition of literacy and other school-related skills than do children from low-income families. However, it is of particular interest to determine the constellation of factors which enable some low-income families to provide their children with the experiences that contribute to school and reading success. Identifying what it is about some low-income families that enables their children to succeed in school, especially in the more challenging tasks presented in the fourth, fifth, and higher grades, is a first step in helping all families to provide those enabling experiences.

The research presented here was based on the following premises:

1. Identifiable factors in children's home environments contribute to their acquisition of literacy and related school learning. It is possible to identify specific relationships between out-of-school experiences and success in reading, writing, and other school-related literacy skills.

2. The factors in the home environment which contribute to the acquisition of literacy and the achievement of school success are a product of both parental belief systems and parental behaviors. An ethnographic approach to describing the child's out-of-school environment is necessary to gain insight into the crucial differences between families that can and those that cannot contribute to their children's continued progress in literacy. Intervention in the child's home situation to improve the literacy-enhancing potential of that situation is likely to be ineffective if it fails to recognize the ecological setting within which the family functions.

3. As discussed above, reading is a developmental process which changes in the course of its development both in quality and in function. The nature

of the optimal home environment may well be different for children in different stages of literacy acquisition.

The following are some of the home factors that can, on the basis of past research, be hypothesized to influence literacy:

1. explicit adult instruction in the use of literacy skills, e.g., encouraging one's children to read books for entertainment, helping them with homework, showing children how to use a library, showing children how to use a dictionary or encyclopedia.

2. modelling the use of literacy by parents or by an adult in the home; e.g., reading newspapers and periodicals, reading books for pleasure, using books as reference tools, playing word games, doing crossword puzzles.

3. requiring the use of literacy skills from children in the normal course of events, e.g., giving them tasks such as reading and writing grocery shopping lists, cooking from written rather than oral instructions, encouraging them to write letters, sending them letters, expecting them to read the menu in restaurants.

4. adult expression to the child of attitudes and beliefs which would support the use of literacy skills, e.g., praising school achievement, enforcing school attendance and the performance of school related tasks, expressing admiration of learned or literary figures, praising directly or indirectly the child's reading and writing activities.

5. structuring the child's environment so as to facilitate his development and use of literacy skills, e.g., accompanying him to the library, giving him books of an appropriate level and interest, having reference books in the home, creating a quiet place for the child to read or do homework, monitoring his use of television, and reading stories and books to him.

The parental contribution to the child's acquisition of literacy and such literacy-related skills as vocabulary, the ability to concentrate on tasks, and skill in the use of drawing and writing implements, begins, of course, during infancy. The child's abilities at age 7 or 8 are a product of the entire history of his interactions with his caretakers and his environment, including his preschool and early school experiences and aspects of the general cultural setting , such as television. Thus, in order to make sense of the way parents interact with children aged 7 or older, one must collect information from the parents about the child's earlier development of language, reading, and writing ability, his TV viewing, his prior experiences in school, and the ways in which they encouraged his development of literacy and literacy-related skills from an early age.

The above five categories of variables represent hypotheses about the effect of the home situation and certain parental tendencies or traits on the child's development of literacy skills.

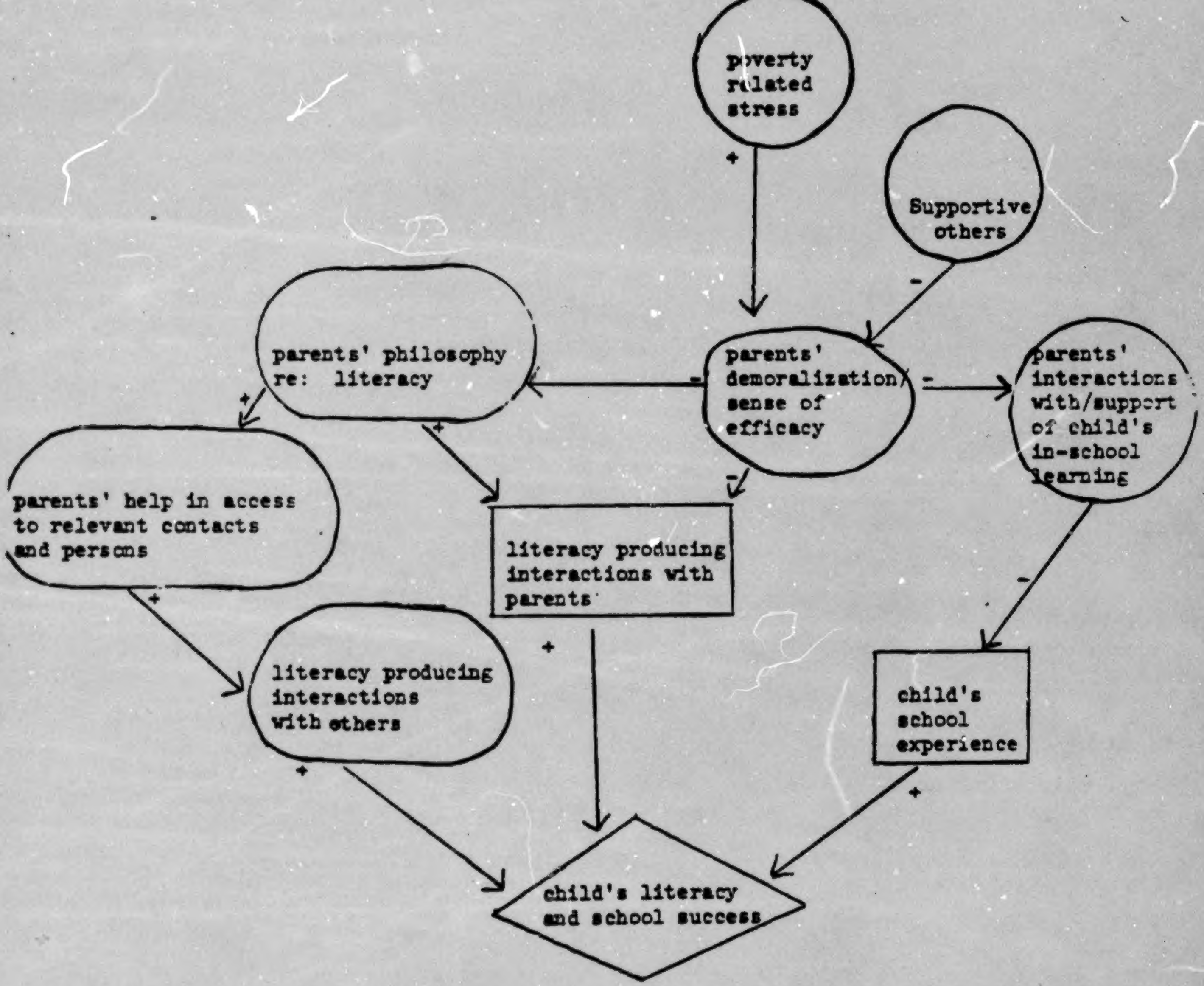
The research studies behind these five hypotheses have not usually taken into account the child's role in effectively initiating, eliciting, or responding to the adult behaviors, with the exception of recent case studies (Bissex, 1979). In order to get a complete picture of the degree to which a child's home environment and family interaction contribute to his development of literacy for learning, both the parental and the child contribution will be assessed. In addition, since the abilities of the child--his general cognitive ability and his reading ability—and his school experiences can further strongly affect his motivation and ability to pursue literacy-related activities at home, information about the way the child functions at school, and the impact the school has on the child and his family, is indispensable to an understanding of the factors at work in ensuring the successful acquisition of literacy for learning. Thus, school observations, teacher interviews, and measures of the child's level of achievement in literacy must be included in any study of the relationship between home environment and the development of literacy skills.

A Model for the Study

Collection of data on the role of children's homes, families, and out-of school activities in contributing to their acquisition of literacy must reflect many different facets of the child's daily activities. It cannot be limited to observations of the child at home with his parents, because too many other factors, such as experience in school, with siblings, and with friends, impinge upon the child and interact with the effect of his parents' interaction with him. Understanding the parents' behavior toward the child requires understanding the ecological setting of the families in question. Factors such as parental illness, maternal depression, job or housing crises, or sudden decrease in family income can compromise the ability of the parents to provide responsive literacy-promoting interactions, even if the parents recognize the need for such interactions and know in principle what they consist of. The following model explicates the kinds of factors that may influence the availability of literacy-producing interactions to children, and the way in which those factors interact. It defines areas in which data must be collected, if we hope to explain why some low-income families successfully provide literacy-promoting environments for their children while others do not. Each of the cells in the model defines an area about which data have been collected. For ease of presentation, the cell are coded as follows (see Figure 1-1):

- squares are used to enclose cells about which direct observations provided the information. These include the child's interaction at home with

Figure 1-1


poverty related stress
+
Supportive others
-
parents' philosophy re: literacy
parents' demoralization/ sense of efficacy
-
-
parents' interactions with/support of child's in-school learning
+
+
-
parents' help in access to relevant contacts and persons
literacy producing interactions with parents
-
+
literacy producing interactions with others
+
child's school experience
+
+
child's literacy and school success

Model for the interaction of ecological factors
in influencing the availability of literacy-producing interactions
to the child

his or her parents during a structured homework-like task, and with teachers and classmates at school during the regular school day.

- circles are used for areas in which we have relied on interview data, from the parents, the teachers, and the children themselves.

- a diamond is used to represent the criterion variable, the child's success in achieving age-grade appropriate levels of skill on various measures of literacy, and in fulfilling teachers' expectations in a school setting.

Two groups of children were compared in the study--above average and below average readers. The groups were selected on the basis of test scores and of teacher recommendation, to exclude the best and the worst readers in particular classrooms, but to be clearly differentiated from one another in terms of their reading skills. Only children from low-income families were included in the study, since it was hoped that the results of the study would contribute to an understanding of how it is that some low-income children manage to succeed at school, rather than merely being a replication of the oft-confirmed finding of social class differences in school success.

Organization of the Report

Chapter 2 of this report presents the procedures used for selecting subjects and collecting data. Chapter 3 presents general information about the 31 families and 32 children who constitute the sample, and Chapter 4 presents a general description of the 7 schools and classrooms in which the children received their formal learning experiences.

Chapter 5 presents results from a serendipitous aspect of the study--an originally unplanned analysis which in the course of discussions among project members emerged as one of particular importance. This analysis had to do with the role of relationships between home and school--contacts and information exchange betwen parents and teachers, comparisons of parents and teachers on their views of the children, homework, grades, parents' views of the schools, and teachers views of the homes--in affecting children's achievement.

Chapters 6 and 7 present data on patterns in children's development of the literacy skills that determine school success--not just reading, but also language skills and writing ability. Relationships among these skills, and changes in the skills and their relationships across the age span second through seventh grade, are discussed in detail.

Chapters 8 and 9 focus on four of the literacy measures--word recognition, reading comprehension, vocabulary, and word production in writing--as they are related to classroom factors and home factors respectively. Finally, Chapter 10 presents a summary of the most important findings and implications of the study for parents, teachers, and researchers.

Before presenting the procedures and results of the study, however, we would like to acquaint the reader with a few of the families who participated in the study, in order to give a sense of the range of the families on crucial demographic variables, to indicate in more human terms what we mean by 'low-income', 'above-average reader', 'below-average reader', 'literacy environment', and many other such terms which will be defined in the report, but also simply to give a sense of how much more there is to say about these families than the hard data presented in chapters 3 through 9 can adequately reflect.

The Palmieri Family

The Palmieris live in a second floor apartment of a two-story house in a low-income neighborhood. The house, which is owned by Mr. Palmieri's mother, is located a few blocks away from Righetti Field housing project. The house is in poor condition, both inside and out. It is not surprising that the house has such a "lived-in" look, since many people circulate through the modest space at all times. The immediate family consists of Mr. and Mrs. Palmieri, both 28, and their three daughters, Cheryl, 11; Lisa, 9; and Nicole, 7. Mr. Palmieri's mother occupies the downstairs apartment and for five months during the period of the study, Mrs. Palmieri's sister and her daughter were living with the family. A number of cousins and teenage members of the hockey team Mr. Palmieri coaches are often there.

Much of the household activity revolves around television viewing, providing the primary source of entertainment for the family. According to Mr. Palmieri, there is some regulation of the children's television viewing, but when asked how the rules were enforced, he responded "I never check, my wife does." Although Mr. Palmieri said that the children had strict bedtimes, on the evening of one visit all of the children were still up at ten-thirty watching television and it seemed that none of the adults was aware of what program they were watching. During another interview, two sets were on constantly with several children watching in the bedroom while seven or eight adults viewed a basketball game on the living room set. A kettle of cold manicotti was left on the stove, and during commercials people helped themselves to food in the kitchen. At one point, Mr. Palmieri's mother sent up a batch of hot cheeseburgers wrapped in foil.

Mr. Palmieri, who regarded himself as the "class clown" when he was in school, left school in the ninth grade to begin working. He describes his current job as a vinyl-siding installer as "the best job I've ever had." Although his wages are higher than in the past, the demands of his job vary seasonally. He works very long days in the summer and his hours may be erratic in the winter. Mrs. Palmieri left high school after her sophomore year. She has worked off and on since then, full-time for the past four years. Of her current job as an assembler in a computer plant, she says, "I find a lot of the work interesting. Everything in there is interesting. I'm fascinated by the microcomputer chips."

Both Mr. and Mrs. Palmieri grew up in large families and keep in close contact with relatives, although, according to Mrs. Palmieri, a few members of her family seem to disapprove of her lifestyle and her husband and, as a consequence, communicate with her minimally. Some conflicts also seem to have precipitated from disagreements with "in-laws." Mr. Palmieri paints a rosy picture of family life; however, Mrs. Palmieri relates a much less blissful portrait, noting marriage difficulties and offering a considerably lower family income estimate than did her husband. She referred to her marriage as a source of stress, detailing three separations in the past three years.

Mr. Palmieri reads the sports page of the newspaper. The family buys no other reading material regularly, except for the newspaper.

When asked about her reading habits Mrs. Palmieri commented: "I'm not crazy about it. I read when I have to." Occasionally, she reads Family Circle or the local Norwich News. She also does very little writing; "I hate to write, I'd rather call."

Many children's books were jammed into a small chest in a room set aside for the children to play in, called "the toy room." Mr. Palmieri's weight lifting equipment was also kept in this room.

According to both her parents, Lisa, grade 4 our focal child, enjoys school and generally works very hard, usually bringing home better report cards than her older sister, Cheryl. After initially having some difficulties with reading, Lisa has improved greatly with the help of a tutor at school. In the last year, her reading has improved from being somewhat below grade level to being somewhat above grade level. Mr. and Mrs. Palmieri describe her as the most avid reader in the household. Although they initiated contact with Lisa's second grade teacher who was concerned about her progress, they don't have any continuing concerns about her school work.

Reports from the school weren't as positive. During the first year of the study, teachers reported that Lisa's glasses were broken and not replaced for several weeks; in addition, Lisa didn't bring snacks from home (as the other children did) and she often had been very sleepy in school, having stayed up too late the previous night. Lisa's third grade teacher described her as "insecure" and "lacking in self-confidence," although she felt Lisa had "opened up more" during the second half of the second year of the study. She termed Lisa as "quiet, well-motivated and organized" despite her insecurity and weaknesses in reading skills. She predicted Lisa would graduate from high school.

Despite the somewhat chaotic atmosphere in the Palmieri household, Lisa seems to receive adequate affection, although it appears she receives little if any academic support from her parents. She has continually improved in school, often surpassing teachers' initial expectations. The Palmieri's exemplify the notion of living one day at a time. One gets a sense that, at times, this attitude lends to an air of joyful spontaneity; at other times the result seems to be a lack of planning and confusion. Whether, in this family context, Lisa's personal gumption and persistence can sustain her school progress through the remainder of her school years remains to be seen.

Edwin is part of the largest family in our study. He is the fourth of eight children who range in age from 5 to 19. All of Edwin's brothers and sisters live at home, with the exception of his oldest brother, who is in the airforce. Edwin's house, on a quiet street in Norwich Corner, was quite orderly inside and out. Before moving there a few years ago, Edwin's family lived in another house in the same neighborhood. On the small patch of ground in front of the house neat rows of tomatoes were growing. Inside it was hard to believe that eight children lived in the house because it was so tidy, although sparsely furnished. The rather large living room contained only a sofa, end table, hassock and TV set. During one of our visits, six kids were scrunched on the sofa and hassock watching television. Edwin and his brothers and sisters do their homework at the dining room table. In the dining room there was a book shelf piled high with books. It was clear the books were used by Edwin and his brothers and sisters because he pointed to books in the shelf several times to make a point.

Edwin clearly sees his siblings as sources of encouragement and help. When something really good happens to him he tells his brothers and sisters about it. He speaks very warmly of his oldest sister who, according to Edwin, helps him best with his problems and worries. She used to sit down and read to him when he was younger. Edwin is expected to take care of his younger brother and sister every day and not to play too roughly with them.

The Rosaldo's moved to Norwich from The Dominican Republic nine years ago. At home the Rosaldo family children speak Spanish to each other as well as to their mother and father. Mrs. Rosaldo speaks the least English of anyone in the family, although her command of it seems better than she openly acknowledges. Mr. Rosaldo serves as spokesman for the family in the school and wider community. We interviewed him; his wife declined to be interviewed even by a Spanish-speaking person.

Mr. Rosaldo believes that Edwin and his 14-year-old sister, Sylvia, are the best students in the family. He said that Edwin can do everything well and he hopes he will go "all the way" in school and become a computer programmer. (Edwin told us he'd like to be a policeman.)

Edwin enjoys school. He seemed well mannered and eager to please. He is aware that his parents like the grades he gets in school because they say, "Keep it up; you're doing good work." When asked to recall his teachers, he particularly remembered those who gave him individual help in reading and math when he was "stuck." Edwin told us that sometimes he has trouble understanding his teacher at school this year and sometimes he turns in his homework late because he doesn't understand it.

He explained that his parents are not always able to help him with his homework because "sometimes it is hard homework." Instead, he turns to his sister Sylvia for help or saves it for the next day. (Mr. Rosaldo also described how he turns to one of his older children from help if Edwin asks him a question he can't answer.)

Edwin said his favorite subject at school is reading. His favorite books are comics and Snoopy books which his friends share with him. He reads the comics in the newspaper, as well as the horoscope on a fairly regular basis. He said his brothers and sisters help him with hard words when he is reading.

Edwin spends most of his time watching television. When we interviewed him on a warm summer afternoon he was eager to finish the interview in order to get back to watching TV. His favorite show is Tom and Jerry, and his whole family watches "Little House on the Prairie" together. The only other activity Edwin reported was drawing, which he often does while watching TV after school and on weekends. His interest in sports led him to choose Larry Bird as his most admired person.

Jennifer Lombardi is an only child living in a very stable extended family situation with her mother, Donna, her maternal grandparents, and a brother and a sister of her mother. Jennifer's mother, the youngest of five children, has been living in this apartment with her parents since her birth. She is a child in her own family. Jennifer gets little bits of attention from all members of the household; she is surrounded by and influenced by all the adults in the family.

Jennifer is close to an aunt (another of Donna's sisters) who lived in the house until about 2 years ago; she likes to stay over at her house and go out with her. According to her mom, Jennifer acts like her and talks like her. Another uncle lives away from home.

The Lombardis live in a triple-decker in West Norwich. Donna's mother and father and her two siblings work but she herself doesn't because "I can't find a job with good hours so that I'd be home when Jennifer gets home." Mr. Lombardi senior works the nightshift so Donna is often the only family member who sees him during the day.

Donna is an avid reader, mostly of mysteries but also of other fiction and nonfiction. She belongs to a book club, swaps books with her sister and is always looking for new titles. She reads a newspaper daily as well as a few magazines per month. She didn't like to read as a child but started enjoying it while in high school. She completed her first year of high school and then dropped out at age 15 when she was pregnant. Four years ago she went back and got her G.E.D. According to Donna, both her parents and her sister are readers, but not her brother, Dennis. He, meanwhile claims to like reading, particularly Agatha Christie books and several magazines a week, particularly those about bicycling or photography. He moved back to the family home from Montana about a year ago, after a string of manual- and semi-skilled jobs. He currently works on an assembly line in a small factory. Although he plays down the amount of television he watches, other family members say he watches quite a bit. There are 2 color and 2 black and white sets in the house but family members like watching the big color set in the living room. They argue over what to watch but grandma always wins. Jennifer doesn't watch much television, even though she has her own TV set. The only programs she has much interest in are gymnastic events and occasionally other programs. She is an avid ice skater; her ambition is to be an ice capades star and her most admired person is Dorothy Hamill. She likes her because "she tries her best."

Jennifer is a very active child, who likes to play ball, rollerskate and bike, as well as ice skate. She frequently plays with friends and relates well to children her own age as well as to adults. She's shy at first, but once she gets to know you she's pretty outgoing. According to her uncle, "she's quite spirited, (like her mother), with a quick temper." Jennifer isn't expected to do any chores at home.

Donna thinks that Jennifer does everything very well: She shows independence and leadership, she's popular and she does well. Donna is pleased that she is getting good marks in school. Jennifer gets monetary reward for bringing home a good report card -- $1 from each adult in the family for a total of $6. It's not surprising that she's brought home only good report cards. Donna attends some meetings at school (for example on school desegration) and goes up to the school if she wants to talk to the teacher and find out what's going on. The teachers have told her that Jennifer is smart, quiet, hardworking, and does what she is told.

Donna places importance in Jennifer's education and the whole family has provided literacy materials for her. Jennifer has a whole array of toys and other playthings -- books, records, tapes, word games that are housed in a little room off the living room. In the living room itself, Jennifer has a wooden desk with all kinds of supplies -- paper, pencils, and her own dictionary ("She's good at finding words"). Donna reads to and with Jennifer for twenty minutes every day and makes her write a few sentences every day as well.

Although Donna follows Jennifer's progress in school carefully she has never given much thought to her future. She feels she is still quite young for her to be concerned. She seems to assume, perhaps naively, that Jennifer's future education and occupational success will 'take care of themselves'.

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Chapter 2: Procedures

In the preceding chapter we introduced a few families and gave a flavor of some of the kinds of information we have available about the families. In this chapter we will detail more exactly the nature of the procedures used for selecting subjects, the kinds of data collected about the children and their families, and some of the techniques for coding and analyzing the data. A difficult aspect of a long-term, in-depth study such as this one is that the data collection involves scheduling appointments with many different members of each family (and their teachers), over a period of eighteen months. Inevitably, incomplete data were collected on some families. Nonetheless, we felt that we should include even these families in the final sample, simply adjusting particular analyses for the presence of fewer subjects, rather than risk biasing the sample by including only those families with whom it was easy to schedule appointments. Accordingly, the number of subjects for whom we have data is indicated for each type of data collected in Table 3.1.

Subject Selection

Recruitment of classroom teachers. A number of criteria directed our procedures for recruiting subjects. First of all, we needed above- and below-average readers (the exact basis for selection of the two reading-status groups will be discussed below) at three grade levels, second, fourth and sixth. We wanted children whose families would be likely to participate in all phases of the 18-month data collection.

Table 2.1: Number of subjects for which various categories of data are available

	Mother interview	Father interview	Child interview	Diary I	Diary II	Diary observa'ns	Family SYMLOG	Teacher questionnaire		Classroom observa'ns		School biography	School test scores	School SYMLOGS
								80-81	81-82	80-81	81-82			
Complete	26	11	32	15	20	27	24	32	21	30	26	31	18	20
Partial	5	7	0	5	0	-	0	0	8	-	-	-	2	-
Refused	1	5	0	1	8	5	8	-	-	-	2	-	-	10
Not available	0	9	0	11	4	-	0	0	3	2	4	1	12	2

	# of siblings interviewed	# of family members ranked in SYMLOG
0	8	-
1	12	-
2	6	2
3	4	10
4	-	6
5	-	3
6	-	3
none available	2	8

We wanted (but were not totally successful in finding) children from exclusively English-speaking families. And we wanted to select both above- and below-average readers from the same classrooms, so that the variation in reading ability would not be attributable primarily to school factors. Furthermore, we wanted children whose classroom teachers would agree to their being observed during the school day.

Accordingly, we decided that we should recruit families by selecting children within particular classrooms in which the teachers had volunteered to collaborate in the study. Teachers were recruited through the good offices of the Norwich School Department, after a number of letters and meetings to explain the purpose of the project. The School Department recommended schools which served primarily working-class populations and were ethnically representative of Norwich. Within schools the project was brought to the attention primarily of the more skilled and enthusiastic teachers. Teachers in eleven classrooms agreed to participate; their participation involved a) consulting with us to recommend likely children, b) providing ratings for those children on various aspects of reading and math skill, c) agreeing to let children be taken from the classroom for the administration of individualized selection tests, d) agreeing to let researchers spend several hours in the classroom to observe the children selected, e) agreeing to fill out a questionnaire about the sample children and about classroom practices, and f) agreeing to let the sample children leave the classroom for administration of the battery of tests to assess reading, writing and language that formed part of the data collection. The cooperating teachers recommended a total of 91 children, of which 88 families could be contacted to obtain permission to consult school records and administer the screening tests.

Selection tests. The purpose of the selection tests was to identify children who were somewhat above average in reading (5th-6th stanines) or somewhat below average (2nd-3rd stanines) without being either extremely gifted or learning-disabled. We wanted this middle range of children because we felt these groups would display most clearly the positive or negative effects of home factors. In order to ensure that we had basically "average" groups of children, we also attempted to select children whose math scores fell closer to grade level than their reading scores, i.e., children whose reading had been either enhanced or depressed by home experience. This criterion could not be applied for the second graders, for whom math scores were not available. Two sixth graders (one above, one below average) violated this criterion; the rest of the fourth and sixth graders had math scores equal to or closer to grade level than their reading scores.

To select our final groups, we used the following standardized achievement test results, based on the children's school records: the Gates-McGinitie Reading Test administered in May of their first-grade year to second graders, or the Stanford Achievement Test (full battery) administered in March of their third- and fifth-grade years to fourth and sixth graders. To supplement the information from these group-administered tests, we administered individually to potential subjects the Roswell-Chall Diagnostic Reading Test and/or Wide-Range Achievement Test, Level I, Reading Substest (for second graders) or the Gray Oral Reading Test (for fourth and sixth graders). In addition, reading group assignments were noted for potential subjects.

Selection of final sample. The vast majority of the families contacted agreed to the initial testing for screening purposes. Many of the children recommended by their classroom teachers for inclusion turned out to be ineligible for the final sample, most because they came from homes where a language other than English was the primary language spoken (19 children fell into this category). Another 16 children were not selected for further participation because of a) chronic absence from school, b) grades and/or test scores that placed them outside our target groups, or c) a very mixed achievement record which made it difficult to classify them. An additional 14 families declined to participate in the full study. Ultimately, 32 families were selected which met most of the criteria for inclusion, though five of these families turned out to be not exclusively English speaking. The subjects selected were distributed across grades, sex, and reading-groups as indicated in Table 3.2.

Data Collection

The major focus of data collection efforts would be, of course, the family, the home, and the child's out-of-school activities. Equally crucial to an interpretation of our findings, however, would be data on the children's patterns of strengths and weaknesses in reading skills, and their abilities in the related areas of writing, vocabulary, and language. These data would need to be comprehensive, and collected in such a way as to add a developmental component to the study. Finally, we had determined that data about the children's in-school experiences,

Table 2.2

Distribution of Sample Children

		Above Average	Below Average	Total
	male	5	3	8
second	female	0	3	3
Total		5	6	11
	male	4	3	7
fourth	female	3	2	5
Total		7	5	12
	male	0	1	1
sixth	female	5	3	8
Total		5	4	9
Total		17	15	32

especially the nature of their reading instruction and their access to reading experiences in school, were indispensable to understanding the dynamics of the home and family effects.

Data collection in these three areas proceeded in parallel, each area the responsibility of a separate research team. In addition to being the only practical solution to the problems associated with the size of the data collection effort, this separation of responsibilities enabled the team responsible for the home and family component to proceed without very explicit knowledge concerning the children's reading status. In most cases, the home interviewers were blind as to the target child's reading level, and were thus much less likely to be biased in their collection and interpretation of data about the home.

Home and Family

All family members. One of the principles which guided our efforts to collect as complete a picture as possible about the children's out-of-school activities and environments was to include all willing family members. We felt that it was crucial to collect information from several different family members - the children themselves and their mothers and fathers, of course, but also their siblings and their resident male caretakers or nonresident biological fathers, when appropriate, because a considerable amount of research on family dynamics has shown that family members often have different perceptions of shared experiences and activities (Framo, 1972; Beavers, 1977; Goodman, 1981; Reiss, 1981). Although we were not always successful in scheduling interviews with all the other family members (fathers were especially hard to involve in the study - only 11 fathers could be interviewed) we feel that in those cases where we were successful the data base is enriched considerably.

The role of observation. A second decision about the nature of data collection came after considerable efforts were made to pilot observation schemes and to carry out pilot obervation sessions. We originally intended to supplement our interview data with direct observation and audiorecording of interaction between the target children and their families at crucial or high-interaction times of the day, because of our conviction that the nature of interaction around books, homework, and topics of general interest could contribute crucially to children's reading skills, vocabulary, world knowledge, and attitudes toward achievement and toward learning. During the initial interviews we collected information about the children's schedules, hoping to be able then to select times for doing observations that would be appropriate and comparable across children. We discovered, however, that given the wide age range and the relative independence of many of the fourth and sixth grade children from rigid schedules or parental supervision, it would be very difficult to find any time for observation that was comparable across children. Furthermore, even when the children were at home and their parents and siblings were present, there was no identifiable time for many families when interaction was likely to occur. The majority of the mothers in the sample worked, so were not home or available immediately after school. Many of the families did not sit down to any scheduled meal that provided an opportunity for conversation. Many children had no homework or did their homework on their own without parental supervision. Thus, there was no time within an hour or so we would be likely to observe the kind of literacy- or information-focused interaction we hypothesized would be crucial. The density of interaction between parents and children in the age range studied here was often quite low, which is not to say that the brief and scattered exchanges the children have with their parents are unimportant. But second-to-sixth grade children present a different and much more challenging case to the observer than do preschool children, with whom interaction is much more constant and dense. Much of the world of interest for the ten-year-old is inside her own head, and not accessible to tape recorder or note-taker. Furthermore, the school-age children we were studying were capable of learning a great deal from very small amounts of interaction. Thirty seconds of help reading a hard word, or just a few sentences expressing interest in what had happened at school, or even just seeing mom select a book rather than the TV for 15 minutes' relaxation, could constitute the source of important learning for the older child. Yet none of these events would show up as notable or frequent in an observation record, and the chances that any of them would occur during a one-hour observation session are quite small.

Accordingly, we decided to rely primarily on our interviews as sources of information about the families, but to include an observation situation which was sufficiently structured that we would, within about a half hour of observation time, be likely to see a fair amount of literacy- and task-focussed interaction. Since the role of homework and parental supervision of homework had by this point in the study emerged as an issue of considerable interest, we designed a task which, we felt, simulated to some extent the nature of a homework assignment, and we asked the mother or father (in some instances both were present) to help the child complete the task. The task was to fill out a diary, using a form provided, for the preceding day, filling in all the activities the child had engaged in, where they had occurred, and who else was present. Two researchers were present for the homework-like task: one who was familiar to the family from previous interview sessions, and one who had never met any of the family members and was blind to the child's reading status. The first researcher explained the task to child and parent, and the second kept a running record of what happened, what exchanges occurred between child and parent, and other events of importance. The narrative records were later transformed into a standard form for analysis, and the blind observer also filled out a SYMLOG form for both participants in the interaction (Bales and Cohen, 1979) (see next section for a fuller explanation of SYMLOG). The SYMLOG rating is designed to rate two or more participants in an interaction on the degree to which each is positive or negative (friendly or unfriendly), dominant or submissive, and task-oriented versus emotional-expressive.

Time allocation diaries. In addition to providing a context (not to say pretext) for observation of parent-child interaction around a homework-like task, the one-day diary filled in during the observation session was designed as a way to instruct the child in filling in the diary form. We asked each child to keep a diary for four weekdays on two different occasions: during the school year, when the diary form included a checklist for in-school activities as well as a supplementary out-of-school checklist, and during the summer, when only the out-of-school checklist was included. The diary format (see Table 2.3) required that the child first write in long hand activities, location, and companions, at the appropriate times, and then go through a checklist and mark any activities engaged in that day. The checklist was included in order to get a more complete record than the long hand diary, and in order to jog children's memories - they were specifically told they could go back and add to the diary if the checklist reminded them of activities not filled in. The diary content has been analyzed for the number and nature of activities engaged in, for the degree of predictability of children's schedules, and for a profile of who they spend their time with.

In addition to the content analysis of the diaries, the writing in the diaries has been analyzed, to supplement the analysis of the writing sample collected during the testing session, for neatness, spelling, handwriting, complexity of utterances, and coherence. (See Appendix A for complete diary forms.

SYMLOG

Having considered a number of schemes for characterizing family interaction in the home (Whiting's (1968) behavioral observation techniques; Caldwell's (1970) H.O.M.E., Steinglass' (1979) family observation system, and two measures of family attitudes, Olson et al.'s Family Adaptability

Name____________________________ Day____________________

MORNING

	What were you doing?	Where were you?	Who were you with? (Mother, father, brother or sister, friend, adult friend relative, or by yourself)
6:00			
6:15			
6:30			
6:45			
7:00			
7:15			
7:30			
7:45			
8:00			
8:15			
8:30			
8:45			
9:00			
9:15			
9:30			
9:45			
10:00			
10:15			
10:30			
10:45			
11:00			
11:15			
11:30			
11:45			
12:00			
12:15			
12:30			

and Cohesion Evaluation Scales (FACES), 1979, and Moos and Moos' Family Environment Scale (1976)), we finally decided on the SYMLOG system.

Some of the other systems either were more appropriate for preschoolers and their families, or else focused exclusively either on cognitive or emotional behaviors, or were inappropriate for use with working-class and ethnically-diverse families.

All family members above the age of five were asked to describe all other family members' typical or characteristic behavior using an adaptation of the SYMLOG Adjective Rating Form. SYMLOG is a set of methods developed by Robert F. Bales and his colleagues for the study of many kinds of groups, including families, "where the personalities of the specific persons involved and their relationships with each other are the focus of interest" (Bales and Cohen, 1979). Although SYMLOG is a large and complex system in its entirety, one may use only a small part of it, such as the Adjective Rating Form, for a given study.

The SYMLOG Adjective Rating form is geared to an adult population of moderate-to-good education. An adjective list based upon SYMLOG concepts but reflecting a child's vocabulary of behavior has been developed by Bonny K. Parke for use with classroom teachers, parents and children (both forms are described in Appendix C of Bales and Cohen, 1979). We used an adaptation of Parke's Adjective List P-10 in our study, because this was appropriate for school-age children and for the adults in our sample who do not have "moderate-to-good educations."

Using the SYMLOG system procedures, we reduced the separate ratings made by family members on the adjective list to single scores for each family member for each of three dimensions: dominant-submissive; friendly-unfriendly; task oriented-emotionally expressive. We then plotted the locations of family members on what is called a Group Average Field Diagram in order to explore the relationships of family members to each other and to see how these configurations might relate to the children's reading achievement. (See Appendix B for SYMLOG rating form.)

The interviews. In accordance with the principle that all family members should be interviewed in order to get a complete picture of events, activities, rules, and attitudes within the family, we designed the interviews for the different family members, especially for the mother, the father, and the target child, to parallel one another as much as possible. The mother and the father interviews were, in fact, identical, enabling us to make extensive comparisons within families on parents' perceptions of their children, their beliefs about child rearing, their attitudes toward their children's school experiences, and other matters on which one might expect agreement between them. The interview for the target child covered the same major topic areas as the parent interview, but of course the ways in which the questions were asked and sometimes the nature of the questions were quite different.

The interviews for parents focused on the following content areas:

Family composition. Number of people in household, their ages and relationships, whether members of the household have left recently and why.

House and neighborhood. Size of house, whether rented or owned, type of dwelling, presence of various kinds of facilities in the neighborhood, availability of play areas, length of time family has lived in neighborhood, degree of satisfaction with neighborhood.

Parents' perception of child's health and personality. How the target child would compare with other children on such items as being active, being happy, getting along with other children, being a leader, being independent, speaking ability, concentration, and adjustment to school.

Caretaking arrangements. The nature of supplementary child care, child's degree of contact with non-resident fathers, and with extended family members.

Child's out-of-school activities. Child's daily schedule, favorite activities, participation in lessons or organized activites, frequency of outings to visit relatives, go to movies, museums, etc., chores and other responsibilities at home.

Parents' perception of child's school experience. Parental involvement with PTA, whether parent knows teacher's name, nature and frequency of communication with teacher, opinion as to child's functioning and special problems, if any, at school, child's grades, what the child likes and dislikes about school, what s/he does well and poorly at, who helps with homework, what the school should teach, whether the schools and teachers are performing adequately, and expectations for the child's ultimate educational achievement and occupation.

Parents' employment and education. Nature of job, degree of satisfaction with job, former jobs, reasons for not working (if applicable), nature of training required and received for job, parents' own educational history and attitude toward their own school experiences.

Parents' reading. Whether parent likes to read, what kinds of reading material are preferred, names of recently-read books, names of regularly-read magazines and newspapers, rating of family members on love of reading.

Sources of stress and support. Contacts with relatives, whether relatives have problems which cause stress, whether such stressful events as deaths, serious illnesses, moves, job changes, and financial changes have occurred in the family, access to and use of clubs, social groups, political groups, or church-related groups, and family income.

Parents' perception of child's reading and writing. Whether the target child likes to read, what kinds of reading material s/he prefers, how much time s/he spends reading, nature of library use, history of learning to read, whether s/he likes word games, being read to, combining reading with TV-watching, how s/he solves problems with reading and with homework, what kinds of things s/he writes.

Uses of TV. Number and location of TV sets, personal preferences in TV programs, activities during TV viewing, reasons for watching TV, whether there are any rules limiting TV use by children, who in the family watches TV the most, likes it the best, controls choice of programs the most, what happens when different family members want to watch different programs at the same time.

Perception of similarities and differences among children. How the various children in the family differ from one another, how they compare in school skills and success, in friendliness and dependence on social contacts, in athletic skills and preferences, in reading preferences and skills, which of the children particularly like each other, spend time together, what sorts of activities they share.

The child interview collected equivalent, though sometimes less extensive, information on the following categories that match the parent interview categories: family composition, perception of school experience, child's reading and writing, child's schedule and activities, similarities and differences among siblings, and uses of TV. In addition, the children were asked questions about their perception of their parents' goals and their parents' responses to their own school problems and successes, and about their emotional relationship with their parents. The questions concerning emotional relationship were drawn from scales developed by other researchers, including the Nurturance Scale (Saunders, 1977), the Punishment Scale (Siegelman, 1965), the Child-Parent Relationship Scale (Swanson, 1950), and the Locus of Control Scale adapted for children (Nowicki and Strickland, 1973).

Interviews with the siblings of the target child could not, for budgeting and scheduling reasons, cover all the areas included in the child interview. These interviews comprised the questions on the uses of TV, the Nurturance Scale and questions concerning similarities and differences among children in the family. (See Appendices C and D for complete parent and child interviews.)

The School

Collection of school data was organized around answering three main questions: How did each child function in classroom contexts central to acquiring literacy skills; what had been each child's pattern of school achievement; and what kind of literacy environment did the school provide? Secondarily, we wanted information from the school's point of view that paralleled what we were getting from families: about homework, parents' contribution to literacy and home-school contacts.

Data collection took place against a background of considerable instability in the schools. A new state tax law greatly reduced local revenues available to the system; several Norwich school districts were redrawn in the first year of our study and consolidated in the second as part of a voluntary desegregation plan. As a result, one of the original schools in the study was closed and seven of the original eleven teachers were laid off or transferred.

Our target children were in eleven classrooms in four schools in the first year of the study; in the second year, with all the reassignments, they were in 23 classrooms in seven schools. While there were no fewer than two target children to a class in the first year, in the second year most of the classrooms we were studying had only one target child assigned. The dispersal of our subjects to a larger number of schools and classrooms made our data collection more child-focused than it would otherwise have been. The fact that we were operating in an atmosphere of low morale made us rely on relatively unobtrusive procedures: we used questionnaires, school records and incidental observations and only observed formally for fairly brief periods.

Particularly because none of our second-year teachers was a volunteer, we were flexible about negotiating which procedures we would use. Chart 2.1 summarizes the number of subjects for whom we have each type of school data. Although our willingness to negotiate resulted in having incomplete data for some subjects, it allowed us access to classrooms, especially during the second year, which we feel are more representative than those many researchers study.

All school data were collected by a team of two researchers, one of whom worked on the project for the entire two years. The three school researchers were all women with substantial experience teaching reading in city schools.

Classroom observations. Each child was observed both years of the study, during April-May of 1980-81 and again in January-February of 1981-82. Observations were recorded in the form of child-focused behavioral narratives covering thirty minutes in each of three contexts: reading instruction, whole group instruction in a context area like math or spelling, and independent work, often homework or supervised seatwork. Since sessions were scheduled at teachers' convenience, children were sometimes observed in all three contexts on a single day, but more often on two or three different days. The observers were trained in using comparable styles of notes, practicing on videotapes and in classrooms that were similar to those in the study. Each observer worked separately, except in classrooms where there was more than one target child.

Between scheduling observations, collecting school record information, distributing questionnaires and conducting interviews, the observers spent considerably longer than 90 minutes in each class. We constructed detailed maps of each classroom, noting displays of student work, provision of literacy materials beyond texts, evidence of student writing, and so forth. Incidental information about the children, their teachers and their schools was recorded in the form of ethnographic field notes. These, together with the child-focused narratives, formed the basis for target child case studies, classroom ethnographies, and classroom ratings

Teacher questionnaires. A questionnaire, rather than an interview, was developed for teachers because few teachers were willing to be interviewed after work and the information we needed was too detailed to collect during school hours. The questionnaire provided a standard format for collecting demographic information on each classroom, details of literacy activities, and teacher descriptions of the target children's competencies. We also included questions about home-school contacts, homework, and educational aspriations to parallel those asked in the mother and father interviews. In the first year of the study, all eleven teachers completed questionnaires; however, there was considerable variation in the amount of detail they provided. In the second year, we did a follow-up interview with 19 of the 21 teachers who completed the questionnaire. We used these informal interviews to probe for more detail or to clear up confusing responses. We also added a section dealing with writing instruction to the 1981-82 questionnaire. The questionnaire dealt with the following areas:

Classroom characteristics. Grade(s), class size, age range of students, their ethnicity and socio-economic status.

Organization of instruction. Team teaching arrangements, subjects taught by specialists, teachers' characterization of activities as child- or adult-centered, types of field trips, library visits, frequency and types of problems with homework.

Organization of reading. Materials used, grouping arrangements and rationale for their use, skills emphasis.

Target child's reading experience. Level of reading competency relative to classmates, factors contributing to this level, reading group assignment, length and scheduling of reading period, texts used, skills focus, and provision of outside help.

Home-student contacts. Judgment about whether family helps with homework, mode, number and content of teacher-initiated contacts with family, obstacles experienced in establishing communication and effects of these contacts, content of contacts initiated by the family and characterization of family's overall contribution.

Target child's competences. Language problems or learning disabilities, participation during whole group instruction, approach to independent work, preferred free time activities, and likely level of final schooling.

Teacher SYMLOGS. In the second year of the study, target children's teachers were asked to complete the same adapted SYMLOG scale that family members had filled out (see SYMLOG description, page 11). Most of the teachers this year had a single target child in their rooms, so they rated the child's behavior compared to that of the class in general. Teachers with more than one target child in their classes rated these children relative to each other, as well. These SYMLOG scales were analyzed using the method described above for the family SYMLOGS. (See Appendix E for teacher questionnaire form.)

School biographies. We saw school records as an easily-accessible and potentially rich source of information about stability of school experiences, administrative contacts with the home and shifts in grades and achievement scores. For each target child (and for siblings when we were given permission) we compiled a school biography. The biography included information on each year beginning with kindergarten: The school attended, teacher's name, number of days present, promotion or non-promotion, grades in reading, language, math and deportment, teacher comments, provision of special services, and standardized test scores. (See Appendix F for school biography form.)

Testing of Literacy Skills

Literacy and literacy-related skills were tested twice, in May/June of 1981 and in April/May of 1982. All tests were individually administered, in two or three sessions, in a quiet room in the child's school.

Reading tests. The children's reading skills were assessed using the Comprehensive Analysis of Reading and Related Skills (Roswell and Chall, Experimental Edition). This test is a criterion-referenced, diagnostic test consisting of six subtests:

Word recognition, in which students are asked to read words of increasing difficulty. Phonics screening, in which students are asked to read letters and words indicating basic skills in word analysis.

Oral reading, in which the student reads passages out loud, of increasing difficulty.

Word meaning, in which students give oral definitions of words presented orally, in isolation, and of increasing complexity.

Reading comprehension, in which students must read passages silently and then answer questions at the end of each passage,

Spelling, in which the student must write isolated words dictated by the examiner.

Writing sample. Two writing samples were collected from each child at each test session: one expository and one narrative. After considering many possibilities for stimuli, we choose two which had been used by the National Assessment of Educational Progress (1972) and by the Brookline Public Schools, outside of Boston, Massachusetts (1972). The two stimuli had been pretested in the Harvard Reading Laboratory in 1977 for evidence of realiability and validity.

The narrative stimulus selected was a picture of an elderly woman who, because she holds a package of tomatoes, is fondly called the "tomato lady" (Appendix G). The instructions to the students were the same used by the NAEP:

> Here is a picture of a woman with some tomatoes. Look at the picture for a while and think about what is going on. When you have decided, write a story that tells what is happening in the picture and what is likely to happen next.

The expository stimulus instructions were:

> Many of us have a special person whom we look up to or admire for reasons that are very special to us. For example, some people admire or look up to famous sports players, to TV or movie stars, to a person in a story, or to a relative or friend. Write about whom you adire or look up to; tell who the person is and explain why you look up to this person.

Each student was given ten minutes to complete each writing tast. As the student composed each sample, the researcher kept a record of the child's writing behavior, the child's interaction with the researcher, and any other comments that the child made.

In addition, the examiner recorded the students' own accounts of their writing habits in and out of school. Each student was asked the following questions about his/her writing:

1. Do you write in school?
2. Do you write at home?
3. (if yes to either) What kind of writing do you do either at school or home?
4. Do you ever write just for yourself?
5. Do you like to write?

The writing samples were analyzed in two main ways - first by holistic scoring and second by an analysis of internal factors. For the holistic ratings, three raters were trained to the range of the papers. Then each set of papers was holistically rated on a scale of 1 (representing the least mature paper overall) to 4 (representing the most mature paper overall). Each paper was also ranked from 1 to 32 - from the least mature to the most mature - within genre. Last, raters were asked to describe the strengths and weaknesses of the papers that they had assigned to their 1 pile, 2 pile, 3 pile, and 4 pile.

The internal features analyzed were based on preliminary studies conducted at the Harvard Reading Laboratory by Chall (1977) using quantitative and qualitative measures of writing which correlated with rankings of both quality and maturity. Other studies of writing assessment consulted included those of Myklebust (1965) and Hunt (1965).

The variables we have analyzed include:

-Total production (total number of words produced) and

-Syntactic factors (T-Units, words per T-Unit, and clauses per T-Unit)

-Number of misspelled words

-Vocabulary use (use of words not on the Spache and the Dale lists)

-Conventions (grammatical correctness, punctuation, number of sentences, average sentence length)

Language. The language tests were designed to collect data on vocabulary, on children's grammaticality judgment, and on metalinguistic awareness. Tests of language ability were included because of the growing body of evidence which suggests that vocabulary, ability to deal with complex syntax, and metalinguistic skill all correlated with reading skill. It has even been suggested that reading at various levels of skill is dependent on having achieved prerequisite levels of skill in vocabulary, syntax, or metalinguistic awareness.

The vocabulary measure used was the WISC-R, administered using the standard instructions and format. The grammaticality test included subtests for children's comprehension of the different syntactic analysis imposed by "ask" vs. "tell," and by "promise" vs. "tell" for their production of tag questions, for their comprehension and production of "and" vs. "although" in simple and complex constructions, and for their ability to distinguish between syntactically anomalous and ungrammatical sentences. The children's metalingusitc awareness was assessed by asking them to explain why certain illicit comparisons (e.g., "the math assignment is harder than a rock") are unacceptable, and to explain why six jokes in which the humor derives from lexical or syntactic ambiguity are funny.

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Chapter 3: The Families

The purpose of this chapter is to give an overview of the kinds of families included in this study, so as to indicate the degree of variability obscured by the label "low income family." Not only is a wide range of incomes included in the classification "low-income," but also considerable variability on such factors as parental education, educational aspirations for the children, occupational level, amount of leisure time, amount of financial stress, and interest in and use of literacy. We collected much demographic data on the families which was found not to relate to the children's reading and school achievement. Those data will be presented here, as well as population data on some variables that did relate to reading success, to match the reader's basis for assessing how these families live and work, who they spend time with, how they solve economic, health, child-care and other problems, and what they do that might help or hinder their children's school learning.

Most of the data in this chapter are based upon interviews with the parents and children. Some also come from the children's time allocation diaries, or from observers' ratings of the various aspects of the families' lives. See Chapter 2 for details of the data collection.

Selection

The Palmieri, Rosaldo and Lombardi families we introduced at the end of Chapter 1 are representative of the range of our sample in family size and composition, ethnicity, attitudes toward school, economic resources, and on many other points. Families were chosen on the basis of only two criteria: that they be low-income, as defined by eligibility for the free-lunch program, and that they have a second, fourth or sixth grader in a Norwich public school who could be classified by our selection procedures as an "above-average" or a "below-average" reader. Compared to many studies of families, especially those motivated by an interest in educational achievement of children, we have a sample of very "ordinary" families. These families were not chosen because their children were failing in school - on the contrary, the children at the bottom of their classes were excluded from our study. The families were not chosen because their children were exhibiting any particular behavior problem - on the contrary, the teachers who recommended children to us selected children and families they thought would be relatively easy to approach. Nor were the families chosen because the children had exhibited exceptionally high levels of performance in school - we excluded the best students in each class, as well as the poorest, from consideration as subjects.

Given our way of selecting families, it should be no surprise that we ended up with large families and small, with single-parent families, intact families and reconstituted families, with a considerable range in terms of financial security, with families where both parents worked, where the mother was a housewife, and where both parents were unemployed, and with variation on all the other demographic characterstics one might consider important. In this chapter, we will describe our sample, in terms of the demographic and social variables that we considered to be of potential importance in relation to children's school achievement. In the next chapter we describe the family members' access to and use of literacy skills. In Chapter 9 the connections among these variables and reading status will be explained.

The Neighborhoods

Since the families were selected via their children's schools, they reside in one of three neighborhoods, each associated with one or two of the schools in the study. Righetti Field is a school district bisected by a major traffic artery which effectively isolates children who live on its far side from their classmates on the school side, since the street can only be safely crossed right before and after school hours when guards are available. The far-side families live in small but pleasant homes which they own, on quiet and safe streets. The school-side families live either in an area about one mile square of triple deckers and other small multi-family houses on quiet, pleasant streets, or in one of two public housing projects. The Project provide rather large apartments and adjacent outside play space for the children, but are quite run down, somewhat crime-plagued, and are considered by some of the residents to be dangerous for the children. The Projects are ethnically and linguistically much more mixed than the other residential areas of Righetti Field. Righetti Field Projects are within walking distance of Norwich Mall, a shopping mall that includes a discount drugstore, a discount department store, grocery stores, and movie theater. There is a clinic and a Headstart program located in the Projects and a public library nearby. Fairly good bus service links Righetti Field to the center of Norwich and to the suburbs where many of our families' relatives lived.

The Norwich Corner neighborhood is ethnically and socially mixed, and is subject to considerably more gentrification than Righetti Field. The Norwich Corner families mostly live in rented (some publicly subsidized, but not project) apartments or triple deckers. Their apartments are in some cases much smaller than the Righetti Field residences, but the exterior aspect of their neighborhood is somewhat more pleasant and congenial. A few families had moved from Righetti Field to Norwich Corner, citing as reasons that it is safer, more comfortable, and more convenient. Norwich Corner is extremely well served by public transportation, convenient for walking to stores, churches, a health clinic, and a public library, but not close enough to movie theaters or to museums for most children to go alone.

West Norwich is the only area in Greater Norwich which is primarily white. It is a somewhat isolated area, not on the way to anywhere, and as a result the streets are very quiet. Housing consists of triple deckers and other small multi-family units, but the houses are closer together than elsewhere, and there is no yard or play space visible from the street. Some of the families living in West Norwich value its quiet and the absence of interracial mixing, but others would prefer to live in Norwich Corner where their children could have contact with more different types of people. West Norwich is farthest away of the three neighborhoods from shopping, movies, museums or other amenities, and it is the most poorly served by public transportation. A neighborhood school provides a health clinic, meeting rooms for social organizations, various lessons for adults, and a branch library.

Twenty-three of our 31 sample families had lived in their current residences more than three years, and 15 more than five years. Thirteen expected to stay there more than five years more, and most (23/30) said they would recommend their neighborhood to a friend moving to town. Eleven of the families had previously lived in another house in the same neighborhood, and only four had moved to Norwich from outside the metropolitan area. In Righetti Field especially, but also for some of the families in Norwich Corner and West Norwich, a major advantage of the neighborhood is that the parents grew up there and their families still live in the surrounding streets. The neighborhoods are familiar and safe territory for parents and for children. Children can often visit grandparents or aunts and uncles alone, on foot or by bike, on a drop-in basis. The parents in these long-resident families were quite familiar with teachers and administrators at their children's school, not just because their older children had gone there, but often because they themselves had attended the same school. Since many of the teachers are veterans of long service in the rather small Norwich school system and have their own roots in the surrounding neighborhoods, the gap between parents and teachers is bridged by considerable mutual familiarity.

Family Constellation

Adults in the family. Perhaps because teachers tried to select families that would be likely to have time and to agree to participate, or perhaps because single-parent families were less willing or able to take the time to be involved in the study, our sample has a relatively high proportion of two-parents families (see Table 3.1). Sixty-eight percent (21/31) were two-parents families, a much larger percentage than in general in the Norwich public school system. Of the two-parent families, three (14%) were reconstituted, i.e., the current resident male is not the father of all the children. Another consisted of a child living with his grandparents and the father in another family classified as two-parent is living out of the country for job-related reasons. In an additional three of the single-parent families, the mother had a current, relatively stable relationship with a man who, in some cases, participated significantly in the chidren's activities and was a major factor in their out-of-school environments. Two children were being raised by a grandmother who functioned as mother; one of these in a single- and one in a two-parent household. Of the children who were residing with their mothers, five saw their biological fathers regularly. In some cases these contacts contributed significantly to the children's knowledge of the world and to their school-related skills and motivations.

In addition to their biological or social parents, some of the children had considerable amounts of contact with extended family members. The Righetti Field families, for example, were typical of the stable working-class population residing in that area. Like the Palmieris, many parents had grown up in the neighborhood and had stayed there out of preference as much as out of financial necessity. They valued the proximity of their own parents and siblings, both as social contacts for themselves and as supplementary sources of child care, and the availability of cousins as playmates for their children. Most of all, one got the impression that they valued the prospect that their own children would stay in the neighborhood when they were grown, and would continue to participate in a social network comprised largely of family members.

Children in 48% of our families were reported to visit their extended family members once a week or more, and only two children reported never visiting relatives (see Table 3.2). Children in 9 families had extended family members living in the same house or building and most of the rest visited relatives living in Greater Norwich regularly. Grandparents, aunts and uncles were the people most often mentioned by mothers in response to the question, "Who, other than yourself, does your child have a close relationship with?" Children in only 26% of the families saw extended family members less often than four times a year; half of these were recent immigrant families who had no relatives living close enough to visit. Several of the households had aunts, uncles or cousins come to stay for several weeks or months during the course of the study.

Siblings. Despite the availability of many adult family members in the environment of most of our sample children, the children spent much more time with siblings (or with same-aged friends) than with adults. Our analyses of diaries kept by the children during one summer week found that three quarters of the children spent an average of five hours per day with siblings, whereas only seven of the children mentioned spending any time alone with either or both parents. For these seven children the mean time alone with a parent was just under one hour per day. Only two of the target children had no siblings (see Table 3.1). Eleven children came from two child families, eight from three-child families, five from four-child families, three from five-child families, and two came from families of seven and eight children. One child lived with his grandparents and two teenaged uncles; his younger sister lived in another household with his mother. The children's siblings ranged in age from 22 years to newborn.

Table 3.1

Family Constellation

	Number of children in family							
	1	2	3	4	5	6	7	8
Number of single-parent families	2	3	3	-	2	-	-	-
Number of two-parent families	-	6	7	5	1	-	1	1
intact	-	6	4	5	1	-	1	1
reconstituted	-	-	3	-	-	-	-	-
Total families	2	9	10	5	3	-	1	1

Table 3-2

Access to Extended Family

	West Norwich	Norwich Corner	Righetti Field	Total
No regular contact	-	1	-	1
Infrequent/irregular contact	-	3	1	4
Regular/infrequent contact Relatives out of town	-	1	2	3
Regular contact/Relatives in town	2	4	1	7
Relatives in Neighborhood/ Frequent visits	-	2	5	7
Relatives live in same household or building	1	4	4	9

The younger children were often the recipients of much attention and help from older siblings. Of the people mentioned by mother as having a close relationship with the focal child, 21% (13 of 62) were siblings. The equivalent figure for fathers was 27% (4/15). Over three-quarters of the mothers, fathers and children responding to interview questions about relationships with siblings said that the child was especially close to one or another sibling in the family. In over 60% of the cases this was with a brother or sister who was more than two years older or younger than the child. Slightly over half of the mothers and children responding (54% of both groups) said the children had special problems with one or another sibling in the family. Only 16% of the fathers responding to this question said that children in the family had problems with each other, however.

Child care. Since 19 of the mothers work, child care was a problem in most of the families. The problem was solved in many cases, as it was for the Palmieris, by relying on extended family members living in the household or very close by. The most frequent solution offered to the problem of caring for a sick child was to leave him/her with relatives. In some families the parents arranged to work opposite shifts so that one would be available at all times, and in 8 families older children had regular child care responsibilities for younger siblings. Only seven mothers reported still paying for child care for any of their children on a regular basis.

Family Income and Economic Resources

The reported family incomes ranged from $5,000 to over $30,000 (see Table 3.3), with over half of the families earning more than $15,000 a year and with only six of the families receiving less than $2,500 per capita per year (a level considered to indicate severe economic stress). Five of the families were sufficiently well off that the mother could be a full-time housewife, or work only a few hours a week primarily for the

Table 3.3.

Reported Family Income

Income Range	Number of Families
$ 5,000-6,999	3
7,000-7,999	1
8,000-8,999	2
9,000-9,999	2
12,000-12,999	2
13,000-13,999	1
14,000-15,999	1
16,000-18,999	2
19,000-19,999	2
20,000-24,999	1
25,000-26,999	2
27,000-28,999	1
29,000-29,999	2
30,000-30,999	4
Not available	5

social contacts (see Table 3.4). In the majority, however, both parents were working full-time in order to maintain an even marginally comfortable life style. In some cases, the very low yearly family income was nonetheless adequate because housing costs were subsidised or borne by extended family; for instance, the Palmieris live in one unit of their parents' multi-family properties, as do several families who will be introduced in later case studies. Welfare constituted a source of family income for only four of the families in our sample, in all cases single-parent families.

Housing

Given the wide range in income level and in family size, it is perhaps not surprising that the families varied greatly in the degree of domestic comfort they could achieve. Some of the homes were quite spacious, comfortable, nicely furnished, well-maintained; whereas others were cramped and poorly furnished, and sometimes dirty, chaotic, and neglected as well.

Eight of the families lived in public housing projects, 13 in privately-rented apartments, 7 in apartments or triple-deckers owned by family members, and 3 in their own single-family houses. Ten of the children in the study had their own bedrooms; sixteen shared with one or more same-sex siblings. Four shared with opposite-sex siblings, and one child shared a bedroom with her grandmother; another shared a bedroom with his mother and brother, and another with his 32 year old uncle.

Even the more economically-strained households provided some amenities for their children. Only one of the families had no television, and most had more than one. Twenty-two of the children owned or shared with siblings a radio, 16 a television, and 11 a tape recorder or record player. One family had an Atari, and another had a home computer, recently purchased because it would "help the boys in school."

Table 3.4

Employment Status of Parents

	Single Parent	Two Parent	Total
No parent working	4	2	6
One parent working	6	4	10
One full time, one part time	-	1	1
Two parents working full time	-	14	14

Most of the children had access to adequate outside play space, although only 13 had their own yards. The projects provided large, though rather littered, unattractive and sometimes dangerous, playgrounds, and the Norwich Corner children all lived within a few blocks of small playgrounds or playing fields. West Norwich children had the least access to play space as the houses in West Norwich are more crowded together than in the other neighborhoods, and because using the public playgrounds requires crossing streets too busy to be safe for the younger children.

Social Aspirations

Although it is an oversimplification, it is possible to think of the families as falling into one of two groups: the stable working-class families, which have working-class aspirations for their children, and the aspirant middle-class families, those who hope and believe that the future holds a different life for their children than they themselves have experienced. We present here four case studies, two of the first type of family and two of the second to illustrate the differences between them.

The Shea Family

Kevin Shea is a sturdy, athletic boy, whose only favored school activities are art and gym. He takes after his father, both in his love of sports and in his dislike of reading and of school. Mr. Shea quit school in ninth grade to start working in his father's small roofing business, and now makes a comfortable living for his family, despite never having finished high school. Mrs. Shea works a few hours a week, more for the social contacts than for the money.

Kevin has had a hard time learning to read, and repeated first grade. At first his parents were reluctant to have him held back, but they agreed finally because they thought that, since he was rather small, he would have a better chance to be a more competitive athlete if kept with kids a year younger.

Both Mr. and Mrs. Shea grew up in Righetti Field, Mrs. Shea in the projects, and they continue to live in that neighborhood because their families and friends are close by. Mrs. Shea knows many of the teachers at Kevin's school from having attended the school herself.

Mrs. Shea hopes that Kevin will graduate from high school and go into the roofing business with his father. She is not much worried by his school problems, except insofar as they cause him to be unhappy at school. Kevin was never the kind of kid who would sit still to look at books, be read to, or play games (unlike his younger brother, Joey, who at four sits and looks at books for long periods of time), so his mother always expected that school would be hard on him. Given her aspirations for Kevin, though, his low grades are not a source of serious concern. Her notion of a good student is "someone who's trying the best they can and passing - I don't want a scholar."

Mrs. Shea does her best to help Kevin at home, using flash cards provided by his teacher, but he resists sitting still to do so. She used to buy books regularly for Kevin and his father had enrolled him in a children's book club, but he never read the books, so they stopped. The Sheas now buy books for Joey, but have given up trying to get Kevin to read. Nor do they read much themselves. Mrs. Shea reads a newspaper occasionally on Sunday, gets the Reader's Digest, and occasionally buys Star Magazines, but thinks they are trashy. Mr. Shea watches TV all evening, and Mrs. Shea watches soap operas every afternoon (partly because all her friends watch, and she needs to keep up in order to participate in their conversations).

Kevin does not participate in any lessons or organized school activities because, as Mrs. Shea puts it, "I don't trust anyone else with my kids." Her unwillingness to use outside child care also dictates her working in the evening after supper, since it means that her husband can then take care of them. In an emergency, Mrs. Shea would call on nearby family members to help out, or perhaps leave the kids with her girl friend who lives next door. She would not consider hiring a baby sitter.

Kevin is, despite his school problems, a very successful child within the Shea family - he takes after his father, prefers his father's favorite activities (watching TV and playing baseball), and dislikes school, as did his father.

The Jenkins Family

The Jenkins' apartment in the Righetti Field Projects is a center of activity for the neighbors and for the friends of the children in the family, Charlene, 22; Valerie, 21; Raymond, 17; and Tracy, 13. In a pattern frequently found in Black, female-headed households, Mrs. Jenkins also provides primary care for her oldest daughter's two-year-old son and a six-year-old foster child lives there. For several weeks, Mrs. Jenkin's three nieces stayed while their mother was convalescing.

Despite the activity and the large number of residents, the Jenkins' apartment is neat, organized, and comfortable. Many books are arranged on shelves in the living room, and by midafternoon dinner is ready on the kitchen counter to be put in the oven. The housework and cooking are all Mrs. Jenkins' responsibility - though she now regrets not having trained her children to help around the house.

Mrs. Jenkins grew up in Norwich and remains very close to her mother, who lives nearby. Her former husband visits to see the kids sporadically, but she cannot count on him for any financial help. The household money comes from the older children, who are working, from payments for the foster child, and from welfare.

Mrs. Jenkins reads and does crossword puzzles while watching TV. She considers a high school diploma very important (perhaps because she herself only completed ninth grade, and was unable to achieve her childhood ambition of being an airline stewardess), is proud that Charlene and Valerie completed high school, and deplores the high wages Raymond is getting working as a laborer for Norwich Public Works, since the good pay is keeping him out of school.

Mrs. Jenkins doesn't help Tracy with homework because "she doesn't need it," though Valerie sometimes helps Tracy. Mrs. Jenkins sees Tracy as a competent student, but thinks she "could by trying harder in school." Tracy is also described by her teacher as undermotivated, though possessing average skills in reading. Teachers know Mrs. Jenkins well from having had the older children in class, and felt that she was generally cooperative and responsive when there were minor disciplinary problems, but probably wasn't helping Tracy much at home.

Mrs. Jenkins has no plans or ideas about Tracy's future, beyond her finishing high school. When asked what Tracy might be when she grew up, she answered, "She's never talked about having kids. I really don't know."

The Jean-Pierre Family

Mr. and Mrs. Jean-Pierre are determined to provide a better life for their three children than they themselves had growing up. Mr. Jean-Pierre came to the United States from Martinique several years ago. Soon after he arrived he sent for his wife and youngest child Marielle, six years old. The two older children, Yvette, 10 and Christopher, 8, stayed in Martinque with their grandmother and attended school there until they were sent for three years ago. At the present time Mrs. Jean-Pierre works to support the family as an administrative assistant in a high technology firm while Mr. Jean-Pierre is receiving technical training at a local college.

Education is considered important in this family despite the fact that Mrs. Jean-Pierre professes to know little about the schools and how she or her husband might affect them, saying "I'm not in education." Mrs. Jean-Pierre told us that "as long as I'm around the children are going to go all the way" in school, meaning graduating from college. She strongly supports her husband's as well as her children's education. It became clear to us that a great deal of importance i attached to Mr. Jean-Pierre completing school in the near future.

Again and again in our interviews with the Jean-Pierre family members the theme emerged of there not being enough time. For example, Yvette said she doesn't talk to her teacher before or after school because there is "no time." Christopher told us his mother didn't read (nor watch TV) because she "didn't have enough time." Marielle said that she had to ask her older siblings for help with school work because her father "doesn't have enough time." Mrs. Jean-Pierre told us that her husband didn't have time to be interviewed the second year of our study because he had so much studying to do. Earlier, he said during an interview that he didn't take the children to places like parks or museums because he must study and thus doesn't "have too much time." In making arrangements for her final interview with us Mrs. Jean-Pierre put a strict time limit of one hour on the amount of time she could give us (which she then herself broke once we started the interview).

The living room of the Jean-Pierre apartment is furnished with two new over-stuffed brown love seats, an armchair and a chest flanked by matching two-feet high ceramic statues of a nude couple embracing. Another two foot high statue of a dog is placed by one of the love seats. Large artificial flowers fill a vase on the coffee table. The living room doesn't have a "lived-in" look and the children are not allowed to play in there. There are no books or magazines in this room. The two daughters share a bedroom and Christopher has his own bedroom. Their TV set, books and toys are kept in the girls' bedroom, and that is where they are expected to play. During the week when the children come home from school they are expected to stay inside the apartment because their parents do not feel the neighborhood is safe for the children to play in.

Yvette seems far older than her ten years. She has a haunting quality about her and there were suggestions in the interviews that she is unhappy at home. She has been given a great deal of responsibility for taking care of her younger siblings and the household when her mother is working and her father is at school. Mrs. Jean-Pierre sometimes feels guilty that Yvette has had to assume so much responsibility, but she is proud of her and openly full of praise, "She's unbelievable, she can take care of the house all by herself, do the cleaning and shopping." Recently, Mrs. Jean-Pierre was sick in bed and Yvette made dinner that night on her own initiative. Mrs. Jean-Pierre said she told all her friends about this and thanked Yvette, told her how important it was, and how much she appreciated it.

Mrs. Jean-Pierre says Yvette is quite musical and creative. She has taken both cello and flute lessons, using instruments rented from the school. She loves to play house, to make dresses for her dolls and play with them. She also took swimming lessons during the winter months. Her mother thinks she doesn't read enough however. Yvette watches a lot of television "because there is nothing else to do."

Christopher is a self-sufficient, engaging child. When he can't figure out how to do math problems at school he comes home and consults his sister's math book. He thinks he's the smartest person he knows because "I keep trying until I reach it." The middle child and only son, Christopher says he is different from "the rest of them" meaning his sisters. Christopher said "I'm not so friendly with my sisters."

Both Yvette and Christopher seem to get entertainment out of reading. Yvette spontaneously related to us some funny things she read in books, but she also said she thinks she reads more slowly than most kids her age. Christopher spoke with more enthusiasm about the stories in his basal reader than most of the other children we interviewed, saying they were "funny and easy." Christopher said he prefers to watch television, however, and doesn't like books very much. He used to go to the library regularly but avoided going for a time after he lost his library card and was told he had to pay for a book he says he didn't lose. He tries to read the newspaper -- mostly to find articles about animals, which he loves.

Yvette entered the Norwich Schools in second grade. She went to first grade in Martinque during the time her parents were in the U.S. and she was living with her grandmother. Mrs. Jean-Pierre said she wasn't sure how Yvette adjusted to first grade, but feels that she would be doing a lot better in school now if it weren't for "the language problem." She said that Yvette gets frustrated because she can't speak English well enough and has had trouble with writing. Mrs. Jean-Pierre feels that some teachers aren't sensitive to this problem and that they may think a child is being lazy when in fact it may be a question of their not understanding English.

Yvette is a quiet, self-contained child who rarely volunteered or spoke up much in the whole class situations observed. In smaller groups she was more vocal and active in questioning.

In reading, Yvette had some problems with word meanings and her language was not always grammatically correct. She seemed comfortable asking her teacher for help on assignments where these problems created difficulties for her. In the fourth grade, Yvette didn't seem to be very sociable with other children in her classes, often working alone, or playing by herself. She was the only minority child in her classroom. Yvette's fourth grade teacher felt she was well-motivated and got help at home on school work. This teacher contacted the father five times about "forgotten" homework to good effect, she thought. The parents contacted her about problems on the school bus. The teacher felt that the parents "backed Yvette up" -- "not pushing her hard" -- and thought this was positive. She thought Yvette was sensitive and friendly but lacked confidence during independent work. She predicted that Yvette would finish community college.

Yvette's favorite teacher was her third grade teacher because she taught her English. Mr. Jean-Pierre praised this teacher as well, saying Yvette had had an excellent third grade year but that during fourth grade he was "not satisfied with her performance." At the end of fourth grade Mr. Jean-Pierre told us that Yvette was going to a local Catholic school because they had been told she "was not strong enough for advancement to the fifth grade" in the Norwich school. This past year both Yvette and Christopher attended Catholic school. Although religion seems an important part of the family's life -- they all attend mass on Sundays, the children were all given saint's names and Yvette's most admired person is God ("because he can do incredible things") -- the parents' decision to send the children to a Catholic school was based on their dissatisfaction with the Norwich schools. Mrs. Jean-Pierre had told us the most important thing a school should teach a child is discipline. She added that Christopher didn't like the strong language at school and had problems with other children, which perhaps reflects her own concerns more than Christopher's.

Christopher has had an easier time than Yvette in the Norwich schools, which he entered as a kindergartner. In our observations in his second grade classroom, Christopher seemed interested during the reading lesson observed; however, he didn't volunteer to answer any comprehension questions and didn't respond when the teacher nominated him to answer. He worked steadily and competently during independent work and in whole group instruction in math he was confident and volunteered readily.

Christopher's second grade teacher felt his competence in reading was due to intelligence and family interest. She moved him from her second to top group. She felt he received help on homework from his family and completed it regularly. She contacted the father, and in turn was contacted by him, about speech therapy for Christopher. She felt Christopher participated well in whole group settings but sometimes had trouble following written directions. She predicts Christopher will complete four years of college.

Christopher and Yvette's relationship is representative of the ambivalence siblings often feel for each other. They continually bickered with each other during our interviews with them. Yvette corrected Christopher's account of things, added comments of her own to his responses and generally put him down. When this happened Christopher sulked and whined and mumbled comments like "sisters are a pain." However, out of each other's hearing they seemed genuinely fond of each other and related incidents in which they were helpful and supportive of each other. Christopher has missed only two days at school because "my sister wanted me to win the attendance prize." Yvette said that she and Christopher"confide in each other and talk about problems and chores and what we do and don't like to do and if our parents are angry every day" when they wait for the bus. Christopher not only told us that he tells his friends to bug Yvette, but two minutes later was saying that if someone teases her he'll tell them to stop it. Christopher seems genuinely fond of his little sister Dominique and showed us an animal book he had made to "make her happy and teach her to read."

Despite the fact that Yvette and Christopher have been given a great deal of responsibility and are quite self-sufficient, they are part of the children's subsystem in the family, which is clearly distinct from the parental subsystem. This division between children and parents is encapsulated in a pair of family photographs on the living room wall: one picture shows Mr. and Mrs. Jean-Pierre and the other the three children. The parents are clearly in charge; they seem to run the family like a tight ship. They are concerned about their children's education and are quick to take whatever action they deem necessary for the children's future.

The Ferreira Family

For the Ferreiras, a Portuguese-American family, strong family values are all-important. It is a traditional family that, according to Mr. Ferreira, adheres to "old world ways," and is "old fashioned" and "conservative." Church and home remain central to their family. Even though both Mr. and Mrs. Ferreira see Mr. Ferreira as head of the household, Mrs. Ferreira seems to be a vocal partner in the marriage and participates in family decision-making. The Ferreiras are a young family: Mr. Ferreira is 32 and Mrs. Ferreira is 31 and their four sons are George, ten; Brian, eight; Mark, five and Frank, four. They have a close extended family support system, and their relatives can be counted on "all the time." Mrs. Ferreira's mother and sister live downstairs; her mother cares for Mark and Frank during the day until the two older boys come home from school. She keeps an eye on all four until Mrs. Ferreira comes home from her job as a nurse's aide. Mr. Ferreira's mother lives in a Portuguese neighborhood near Norwich Corner and other relatives live nearby. The children spend quite a bit of time with their grandparents, aunts and uncles. George helps Grandpa cook and does errands for Grandma.

The Ferreiras live on the second-floor apartment of a double-decker which they own in Norwich Corner. They've been living there for eight years and both parents "can't imagine moving." The apartment is well-furnished, cheery, and immaculate despite the presence of young children and presence of two Chihuahuas named Chuchi and Chacha. There is ornate furniture, particularly in the dining room (plush, red velvet-covered chairs around the dining room table, large crystal chandelier, china cabinet). The spotless kitchen contains an avocado green stove, refrigerator, freezer and dishwasher, as well as numerous small appliances; the den has a comfortable sofa and easy chairs, lots of plaques and photos on the walls, and a large television set; the living room is also nicely furnished, but seems hardly used by the family. There are four bedrooms; George has his own room, which is very neat. Pictures are on the wall, trophies from Little League and books line the bookshelf, and there is a desk with an office desk chair (both bought by his father). George is very proud of his room and of his possessions.

George has a flair for art. He loves to draw, especially very detailed pictures of battleships and spaceships. Mr. Ferreira brings lots of paper and pencils and pens home to George from work (he runs a loading machine in a paper factory).

Mr. and Mrs. Ferreira are proud of their boys. They believe that it's important for the children to be praised so they will feel good about themselves. Both older boys are doing well in school. George had problems adjusting to the first grade, but going to a special class really helped him. "He has quite a few friends and generally gets along with everyone," according to Mrs. Ferreira. "He can do anything he sets his mind to." Brian is breezing through school.

Little League is a big part of George's life. He's up for the "majors" because he's a skilled player. But "baseball comes second to schoolwork. He knows that." School is extermely important to both parents; they want their children to graduate from college. "In this country, school is free and children should take advantage of it," said Mrs. Ferreira. And Mr. Ferreira feels that "schools are in a tough spot because they are left to make up for what families should be doing in the first place." Discipline and respect are important values for children to be taught - first by the family but also reinforced by the school. Mr. Ferreira feels that the unruliness of his neighbors' children is due to an "I don't care" attitude on the part of the parents.

At school, George's behavior reflects his parents' emphasis on school and achievement. He operates in a very businesslike and goal-oriented way, and deals with reading workbook exercises very efficiently. He tends to be competitive and strives to get teacher attention and approval. His teachers call on him frequently, but see him as an "average" student. He brings in homework regularly, and takes care to check his work. Neither his fourth nor his fifth grade teacher had had any contact with his parents, so it is perhaps not surprising that they were unsure how much positive impact George's parents have on his schoolwork.

The six Ferreiras spend a lot of time together as a family. They play ball together, watch TV, visit relatives. Schedules, chores, and doing homework are stressed in this family. Mr. Ferreira helps the boys with homework (much more than Mrs. Ferreira does) and he reads to George more now than he used to and has enrolled the boys in a book club. Both Mr. and Mrs. Ferreira are competent readers - mostly of popular magazines rather than books - although neither completed high school. Mr. Ferreira came here from Portugal in his teens, after completing nine years of schooling there. Mrs. Ferreira emigrated as a young child, and went to school in Norwich but had to quit high school in tenth grade because her mother was ill.

The children speak English to each other, to their parents, and to their friends. The parents sometimes speak Portuguese to each other, but primarily speak English to the children. However, the children do understand Portuguese and speak it to their grandparents on occasion.

The Ferreiras have high expectations for their children. They expect them to go through college and mentioned architecture and law as possible professions for them.

The Jean-Pierre and the Ferriera families are typical of the aspirant middle class families in the sample, in that they are relatively recent immigrants who are working hard to ensure that their children will go to college and achieve both financial and professional stability. The Sheas and the Jenkins are typical of the families, long resident in Norwich, who hope their children will graduate from high school, find the same kinds of semiskilled jobs their parents had, and settle down in Norwich close to their family.

Ethnicity and Religion

Of the families in the sample, six are American-Black and five are Caribbean. There are three families of Hispanic background, two of Portuguese background, one of Greek background and three with Irish ethnic identities. The other families are of mixed or remote ethnicity. Spanish was used as a home language in the three Hispanic families, Portuguese and Greek were spoken in one household each, and Haitian Creole was used in two of the Caribbean homes. Only one Spanish-speaking child, however, was reported to use Spanish as much as English at home, and all the children spoke English exclusively to their friends. West Indian parents showed some dialectical characteristics in their speech, but were exclusively English-speaking. The other families spoke standard English, though in a few additional cases the parents spoke Portuguese or Greek with their own parents. Of the children from non-English-speaking homes, five were above average and three below average readers (there were two subject children in one family where another language was used in addition to English).

Fifteen of the sample families are Catholic, one Greek Orthodox, and five are affiliated with various Protestant churches. Seven of the mothers report that they have no church affiliation.

Childrearing Attitudes

The variety in the families included in our sample is revealed by the range of their answers to questions about child-rearing beliefs. For example, we asked at which age children could be expected to be independent in things like making dinner, taking public transportation, having chores, and earning spending money, and found ranges of from nine to nineteen years (see Table 3.5). In some families, the seven and eight year olds were responsible for a significant portion of the cleaning and cooking, and were expected to take care of themselves and stay alone and out of trouble after school until their parents got home. In other families, children of twelve and thirteen were not yet expected to have chores, earn money, take care of younger siblings, or stay alone.

Parents' Education and Educational Expectations for Their Children

There is a range of educational achievements of the parents in our sample (see Table 3.6). Over one-third of the mothers did not graduate from high school. Of these eleven, four women had attended grade school only. One of these was taking courses toward a high school equivalency. Another third of the mothers had graduated from high school. One single mother was taking night courses one or two at a time and working on a bachelor's degree. The remainder had some college or technical school training. Aside from one mother who received a master's degree, there were no other college graduates among the mothers. Of the twenty-three fathers for whom we have information, all had completed grade school. Approximately 23% graduated from high school

Table 3.5

Childrearing Attitudes

	Average Age		Range
At what age do you think a child should be able to:	Mothers' Report	Fathers' Report	
take public transportation alone	10.7	12.0	6-14
stay home alone for a couple of hours	10.0	6.0	4-15
settle an argument with older kids	9.7	5.2	5-15
read books without help	6.8	3.6	4-11
take part in adult conversation	8.7	4.5	4-22
make his/her own dinner	10.9	5.6	7-18
stand up for him/herself with other children	7.2	4.4	2-13
take care of younger children	10.6	8.0	4-16
go alone to a movie	13.0	6.1	8-18
know how to behave in company	6.1	4.8	1-15
earn his/her own spending money	10.1	7.4	4-16
have household chores	8.0	9.2	4-13

Table 3.6

Parental Education

	Years of Schooling					
	<9th	9-11th	12th	12-15th	16	>16
Mothers	6	7	9	7	0	1
Fathers	1	9	6	1	5	1

with another 43% not graduating. One father (4%) attended some college and the remaining one-quarter graduated from college. The one man who received a master's degree lives with the mother in our sample who has a master's degree.

Nearly all the mothers and fathers wanted their children to receive more education than they themselves had obtained. In the remaining families the parents' aspirations for their child's education were congruent with their own educational attainment. For example, two fathers and two mothers who graduated from high school wanted the same for their daughters. One couple wanted their boy to go to graduate school as they themselves had done.

Seventy percent of the mothers wanted their children to graduate from college, with the other thirty percent hoping that their child would graduate from high school. Fathers had about the same educational aspirations for their children as did the mothers. Approximately two-thirds of the fathers wanted their children to graduate from college. The remaining one-third wanted their children to graduate from high school. The majority of both mothers and fathers felt that anyone who can do the work can go to college.

Expectations (what do you think your child will actually do?) of both mothers and fatherswere slightly lower. Sixty percent of the mothers expected their children to get a college diploma, thirty percent to graduate from high school and ten percent did not expect their children to graduate from high school.. Of the thirteen fathers responding, almost one-half expected their children to graduate from college, another half expected their children to graduate from high school.

We have comparable data for eleven sets of parents. In nine of these, both mother and father had the same expectation for the child's educational attainment.

Parents' own experiences with school when they were growing up tended to color their educational aspirations and expectations for their child. Although most parents wanted their child to go to college, parents who liked school a lot were more likely to want their child to graduate from college. Parents who only liked school a little or who disliked it were more likely to hope their child graduates from high school.

Parents' Occupations and Occupational Aspirations for their Children

The range of parental occupations was great. Mrs. Grant with a third-grade education, and Mrs. Espin with a ninth grade education, worked in an institutional kitchen serving food, and Mrs. Cruz worked cleaning people's houses. The most frequently-held job among the mothers was secretary: five mothers were secretaries but one of these was actually a clerk/typist, and one an executive secretary. Other occupations are listed in Table 3.7.

Fathers' jobs ranged from maintenance man and truck driver to lab technician, engineer and assistant bank manager. Two of the fathers with relatively little education had their own small businesses, providing painting and plumbing services respectively, and provided relatively high family incomes. A complete list of fathers' occupations is given in Table 3.7.

Mothers and fathers were asked about their aspirations (what would you like your child to be?) and expectations (what do you think s/he will actually do?) for their child's occupation. Children were also asked what they want to be when they grow up.

Table 3.7

Parental Occupations

Mothers' Occupations

- Nurses aide (2x)
- Cashier
- Assembly line inspector
- Food service worker (2x)
- Secretary (5x)
- Bookkeeper (2x)
- Electronics assembler
- Machine operator
- Teacher
- Housekeeper
- Key punch operator

Fathers' Occupations

- Truck driver (2x)
- Machine operator
- Painter
- Laboartory technician
- Machinist
- Maintenance
- Sales
- Autobody repair
- Plumber
- Police
- Recreation director
- Farmer
- Teacher
- Engineer
- Assistant bank manager

Both parents' aspirations for their children ranged from unskilled to professional jobs. Nearly half of the mothers and fathers wanted them to have professional jobs. A handful felt that the children's jobs should be the children's own choice (for example, "it's up to him" or "whatever she wants"). In eight families, mothers' expectations were similar to their aspriations for the children. Fathers were more uncertain about their children's futures than were mothers. Several said, "I don't know, nothing specific," or "hard to say" or "a good profession, one that's in demand."

Of the eleven cases in which both mother and father responded to questions about aspirations and expectations for the children's occupation, three sets of parents agreed on what they'd like their children to be. In all three cases, mother, father and daughter all mentioned something in the medical field.

Parents and their children were not generally congruent in their expectations. Children did not mention professional jobs as frequently as their parents; children were more likely to mention jobs such as sports player, actress, cruise director, detective, model, fireman. Many of the children's expectations seem influenced by their television viewing.

As far as parents' own expectations when they were growing up, 37% thought they'd have a professional career, another 30% a semi-professional career. Fifteen percent thought they would be mothers. Three-quarters of the fathers thought they would be in a professional job, the other quarter some type of semi-professional job.

The Children's Functioning in and Out of School

We set out to select children for the study who were slightly above or slightly below average in reading. Since children were recommended by their teachers (see Chapter 2), we got a group of "ordinary" children. Their ordinariness is reflected in their parents' perceptions of them. Only four of 30 mothers and two of 13 fathers said that the target child had any psychological or emotional problems, but none of these problems was serious enough that the child had received help for it. Ten of 31 mothers (three of 15 fathers) said their child had some health problem or handicap; these ranged from poor eyesight to back problems to skin rashes. None was serious or debilitating. The children had been hospitalized an average of .5 times, and no child more than twice. Twenty-one of the children had never been hospitalized, and only two children for longer than a week. Twenty-seven mothers said their children were "quite healthy" and three "fairly healthy." No one said "fairly" or "quite" unhealthy. Five mothers said their children were somewhat accident-prone, and twenty-five that their children rarely or seldom had accidents.

Twelve mothers reported that their children had had some behavior problem in school, but no child had ever been expelled or gotten in trouble with the law. The majority of mothers said their children were average on such characteristics as number of friends, getting along with peers, with older kids, and with adults, and verbal ability.

Mothers and fathers reported in general that their focal children were not having any special problems in school. Thirteen mothers said their children were doing as well as most in school, ten better than average, four somewhat below average, and two much worse than average. Interestingly, the majority of both above-average and below-average readers were seen by their mothers as average students.

Parents were more likely to say that a sibling was having trouble in school. One or another parent in 13/30 families said that a brother or sister was having trouble in school. In the eleven families in which both mother and father were asked this question, there was agreement between them in only four families. In each of these four families, mother and father said no brother or sister had a problem. In the seven remaining families either the mother or the father, but not both, said a sibling was having academic or behavioral problems at school. Parents reported nine siblings as having academic problems, three siblings as having behavioral problems, and one sibling as having both. We might speculate that one or the other parent in any family worries about school problems or is more tuned in to school-related matters.

One indication of children having difficulty in school is their having to repeat a grade. At the start of our study 18.75% of the focal children (6/32) had repeated a grade in school: five children first grade and one child third grade. Two additional children repeated second grade during the second year of the study.

Siblings of six of the eight focal children who had repeated a grade also had repeated a grade during their elementary school years. One sibling of a focal child had repeated two grades, and two siblings of another target child had each repeated a grade. Siblings of seven other target children also had repeated grades during their elementary school years.

Older siblings of the target children whose families had recently immigrated to the United States generally had more trouble in school than the younger target children, perhaps because language problems and/or differing expectations on the part of the school had a greater impact on the older children.

Literacy

Parents' reading. The families in this study varied as much in the amount and kind of literacy they engaged in as on the other characteristics we have discussed. Since information about the families' literacy derives largely from interviews, it may be somewhat colored by the parents' and children's knowledge that we were interested in reading.

Twenty-one of twenty-six mothers and eleven of thirteen fathers reported that they liked to read, and an almost equally high percentage said they read books, with romance and mysteries first choice of reading for the women. Nine women and six men reported that they liked reading biographies or about factual topics.

However, only nine women and six men could mention any favorite authors, and only four women and four men more than one author. Fifteen women could mention the names of no magazines they read regularly, and the same number did not read a newspaper regularly. But six women and four men read more than two magazines on a weekly basis, and thirteen women and twelve men read one of the major urban newspapers regularly.

Some of the parents reported having hated school and reading as children, but ten women and ten men could remember books they had especially enjoyed as children, and five women and nine men remembered childhood authors. Mrs. Gallagher remembered six different authors she had read during her childhood, and Mrs. Williams tried to get Jessica interested in Nancy Drew because she had enjoyed the Nancy Drew books so much herself as a child.

The information about reading and degree of enjoyment of reading gained from the interviews did not always match the interviewers' initial impressions based on the presence of books or other literacy materials in the household. Especially in the smaller homes, there was often little room to store books publicly, and magazines and newspapers scattered about would have violated the family members' sense of neatness. In the Conlon household, for example, where the mother and both children read a lot, no books were visible. During the course of the interview, Mrs. Conlon asked Jimmy to get the book she had just bought him, as an example of the kinds of things he liked to read. He extracted it from a drawer in the kitchen. Mrs. Conlon wanted to lend the interviewer the book she herself had just finished and enjoyed greatly, but she had given it to a friend at work, since "there isn't room here to keep old books."

The women in our sample families were more likely to be readers than the men; ten women to four men said they themselves read the most in the family; whereas seven women and six men said their spouses read the most. In ten cases women reported that one of the children was the biggest reader in the family.

Parental provision of literacy. Just as degree of family members' use of literacy was not necessarily reflected in the physical aspect of the household, parental uses of literacy did not necessarily relate directly to provision of a literacy environment for the children. Consider the Sheas: though Mr, Shea would never have read for pleasure and considered his own life quite complete without extensive literacy skills or experience, he enrolled his son Kevin in a children's book club at age three, and his second son, Joseph, had and used many books appropriate for a preschooler.

In order to provide a summary picture of the degree to which mothers and fathers used literacy, and the degree to which they provided a literate environment for their children, we devised the following scales:

Parental literacy scale:

1. Non-reader - limited reading skills.

2. Minimal reader - reading skills adequate but little interest in reading.

3. Reader - reads for a variety of purposes, including pleasure.

4. Print-worm - reads for a variety of purposes, chooses reading as most-desired leisure-time activity.

Provision of literacy scale:

1. No provision of formal or informal literacy materials or experiences for the child.

2. Responds positively to literacy-related behaviors of child, buys child literacy materials on request.

3. Provides appropriate books and magazines in adequate numbers. both in response to child interest and spontaneously.

4. Seeks out opportunities to provide literacy experiences for the child.

The parental literacy scale for mothers and fathers is positively correlated ($r = .467$, $p < .02$) for the nineteen cases where we have data on both parents. The provision of literacy scale is positively correlated with both the maternal literacy scale ($n = 31$, $r = .752$, $p < .00$) and the paternal literacy scale ($n = 19$, $r = .469$, $p < .02$), suggesting that one can identify a single dimension of literacy in the home.

Children's reading at home. Four children in our study said they had no books of their own. Twelve children said they had from one to ten books. The rest of the children said they had more than 20 books that they owned or shared with a sibling. We did not always see the children's books when we visited in the homes. One child told us his books were kept in a paper bag and another child said they were kept in the cellar at her small crowded house. Jimmy Conlan told us, "My mother took my books to Children's Hospital 'cuz I'd read them all." Most of the children said they kept their books in their rooms. We also saw children's books casually jammed into a toy box in a spare room, others crowded into a small book shelf in a sparsely-furnished dining room, and others neatly arranged on shelves in a hallway designated by one family as the "toy room." In Linda Cruz's apartment, books were piled up along the walls, since there were no bookshelves and hardly any furniture.

Mothers reported the number of hours per week their children read for pleasure. This ranged from zero to six hours per week, the average being about three hours a week. Mothers also reported the number of books their children read per month, ranging from one to eight books, with the majority of children reading between two and four books each month. Children also mentioned the number of books that they had read recently for fun outside of school. Children reported reading anywhere from 0 to 15 books. While there were no significant differences between grade levels, children did report a wider range and more books as they got older.

All the fourth-grade children said they had read a book lately they didn't have to "but just wanted to." This was true for about three-quarters of the second graders and two-thirds of the sixth graders. Approximately equal numbers of boys and girls said they hadn't read a book recently.

Nearly every child mentioned a favorite book by name, but less than a fifth of the children named a favorite author. All but one of these children was a girl. None of the second-grade children named favorite authors, but nearly half of the sixth graders did. Two children named two favorite authors and one child named four favorites.

There was a wide range of topics and types of books children said they didn't like to read. These included "hard books," "scary books," "love stories like my mother reads," and "teaching dolphins to swim." Non-fiction books were the most disliked, for example, biographies, history and science. One child said simply, "Social studies books have too many hard words."

About three-quarters of the children said their mothers liked to read. Fewer children (60%) said their fathers liked to read. It was interesting that more children said they didn't know if their mothers liked to read than if their fathers did. Most children said that their friends liked to read. Only two children said unequivocally that their friends did not like to read.

Work by Durkin (1982) and Chomsky (1972) suggests that children who have been read to regularly as a child have an advantage later on in their own reading. Just over half of the children in our sample said that someone sat down and read to them or used to read to them when they were younger. About a fifth of the children said that this occurred every day. The rest said this happened "sometimes." Most children said their mothers read to them. A few said their fathers, or both their parents, or their siblings read to them.

Three-quarters of the children said they read the newspaper sometimes. Over a third of these children said they read the comics. Only a few children read the sports pages or the news section.

Most of the children said their family got some sort of TV guide on a regular basis, but less than a fifth of the children said they used it to decide what to watch. Less than half of the children said they had bought a book or taken one out of the library that had to do with a television show.

A surprisingly large number of children said they had their own library cards (88%), and over three-quarters of the children said they went to the library regularly. About a third of these went once a week or more, and an equal number every two weeks. Mothers reported that their children went to the library more frequently than the children themselves reported. Fifty percent of the mothers reported, for example, that their children went to the library once a week or more, whereas only 25% of the children reported going that often. The children went to the library with a friend or sibling, or else they went alone. Only a handful of children and mothers said that the children went to the library with a parent. Boys and girls reported going to the library with the same frequency.

Fourth graders were the most positive of all the children about reading. All the fourth graders said they liked to read "some" or "a lot." Sixth graders were less positive about reading; a majority of them said they liked to read "some," and only two sixth graders said they liked to read "a lot." The one second-grade child who said he hated reading subsequently repeated second grade. It was interesting to note that the three children in second grade who said they didn't like reading very much were all in the same classroom.

Girls reported liking to read more than boys ($X^2 = 3.28$, $p < .10$). Five times as many boys as girls said they didn't like to read much or else hated it. Black and white children did not differ in how much they liked to read, but all three Hispanic children said they liked to read "a lot."

A third of the children, slightly more girls than boys, said they wished they had more time to read. There was a tendency for older children to say this more than younger children. Children at each grade level were equally divided as to whether they preferred to read or watch television. Only two children, both fourth graders, said they liked both equally.

Reading at school. About a fifth of the children said that reading was one of their favorite subjects at school. Most of these children were fourth graders and no second grader said that reading was a favorite subject. Only one child, a second grader, said that reading was his least favorite subject. Two other second grade children said that phonics was their least favorite subject.

Nearly twenty percent of the children said they read "very well," fifty percent said they read "pretty good," while the rest of the children (31%) rated their own reading as "fair." No children said they were "poor" or "bad" readers.

Eighty percent of the children reported they liked the book they were reading for reading group. Significantly more fourth and sixth graders than second graders reported being bored with reading at school ($X^2=4.45$, $p < .05$), making comments like "the stories say what you already know-there are no funny or weird parts" and you "get sick of the same book."

Conclusion. We have seen that there is an enormous range among the parents in the degree to which leisure time was devoted to reading, in the degree to which reading was a major source of information for them, and in the degree to which they worked to enhance their children's literacy skills. Only three of the mothers and none of the fathers had limited literacy skills. The vast majority were perfectly competent to read notices from school, to fill in forms, to help children with homework, and to meet the literacy demands of such jobs as secretary, mechanic, or small business owner. Within the group of competently literate parents, however, there were some who viewed literacy as a source of revelation and knowledge as an enrichment of their lives, and others who viewed it the way most of us view arithmetic - a handy skill to have but certainly not a major source of enjoyment! Given the range in the degree to which literacy is enjoyed and exploited by the parents and to which it is being sucessfully mastered by the children, one of the goals of our study was to examine how parental uses of literacy might influence children's reading achievement. The results of that analysis, and of the analyses of the home factors that affect children's reading, will be presented in Chapter 9.

Like the parents, the children differed enormously in the degree to which they read for pleasure. In addition, they differed much more than the parents in their reading abilities - the children's reading skills do not correlate highly with their self-reported reading success or reading pleasure (see Chapter 9).

Organization of the Children's Daily Lives

Most of the information we obtained about the organization of the children's daily lives came from the parents' and the children's interviews. However, the time allocation diaries the children filled out during two four-day periods, once during the summer and then again during the school year, provide us with evidence about children's activities that supplements interview information. This section will be a description of the children's activities and routines, gathered from the interviews and diaries. First, the diary format and return rate will be described.

The Diaries: Diary and Checklist Format. Each day's diary consists of two parts. The first part is a three page form divided into half-hour time intervals (See Appendix A). We asked the children to write down on these pages everything they did from the time they woke up until they went to bed. There were spaces for what they were doing, where they were, and who they were with. During the summer, we asked them to fill out the diary for the entire day. During the school year, they were to fill in the diary (hereafter called the "winter" diary, since most of the second round were completed in the winter months), for the time they were out of school.

The second part consists of checklists of activities which we asked the children to complete in conjunction wit the first three pages. The summer diary's checklist consisted of one page of forty-three activities; the winter diary had two accompanying checklists, one for out-of-school activities and one for in-school activities (see Appendix A). The instructions were: "Put a check in the box next to anything you did today." We suggested to the children that the checklist might help them remember events during the day that they had perhaps omitted from the earlier pages of the diary. As we later analyzed the diaries, it became evident that many children did not go to the diary to fill in the gaps after completing the checklist.

We felt that these two parts of the diary would give us complementary information. The time allocation part provided information about the duration and sequencing of activities; the checklist allowed for aided recall and turned out to be more informative as to the range of children's activities. Particularly at the younger ages, children do not have a good conception of time. We don't know whether the number of hours they reported doing things is accurate. It may be that some children enjoyed the task more or felt more conscientious about completing it so that their diaries were more complete than others. Also, some activities are so habitual for children that they don't think to write them down, for instance, "playing with pet," "talking on the phone," or "taking a bath." However, when the children go through the checklist, they are reminded of that particular activity and thus check it off. For some children, doing something, such as going on the bus or subway, may just be a means of getting to an activity, but other children may see it as an activity in and of itself.

Return rate. In the summer, we distributed diaries to twenty-one of the thirty-two children and twenty children returned them to us in the mail, yielding summer information for eight second graders, six fourth graders, and six sixth graders. During the school year, our return rate was lower; we received twenty diaries out of the twenty-eight that we distributed - from six second graders, eight fourth graders, and six sixth graders. Families gave a variety of reasons for not sending them in during the winter, from mother having a baby to a child telling us she didn't have time. Perhaps there was less to do in the summer, the diaries were more of a novelty the first time they did them, and children were more aware that nothing terrible would happen if they didn't send them in. Thirteen children returned both summer and winter diaries, approximately the same numbers of second, fourth, and sixth grade children.

Number of entries in diaries. For the children who completed all the diaries, the number of entries mentioned was fairly consistent across all four days. We might have expected the diaries to become sparser as the days went on, but this did not happen. The number of entries per day ranged from five to twenty-four in the summer and slightly fewer, from three to twenty-one in the winter, for children in all grades. The mean number was about fourteen entries per day in the summer and about twelve per day in the winter. It should be remembered that the approximately six hours per day that they were in school they were not asked to account for in the diaries. In both summer and winter, fourth graders wrote in more entries per day than did either second or sixth graders. Fourth graders may be more conscientious in doing this sort of task than sixth graders, as well as more capable than second graders. (This finding of fourth graders writing more than second or sixth graders is similar to a trend found in the writing samples which will be discussed in detail in Chapter 7). Total entries listed by the twenty children during the four summer days numbered just over one thousand. For the twenty children in the winter, total entries listed numbered eight-hundred-fifty.

Who the Children Spent Time With. For each activity, children were asked to write down who they were with. In the summer, three-quarters of the children wrote down that they spent time alone - an average of nearly four hours per day. Ironically, the two children who mentioned spending the most time alone (seven hours each) were from large families. In winter, again, three-quarters of the children mentioned spending time alone, but only about an average of between two and three hours per day.

Nineteen out of the twenty children filling out summer diaries had brothers and sisters - ranging in number from one to six. In line with our expectations, the summer diaries showed that the children spent much more time with their siblings than they did with their parents or other adults. Three-quarters of the children indicated that they spent some time with siblings, an average of 5.06 hours per day, while only seven children mentioned spending any time alone with either mother, father, or parents. For these seven children, the mean time spent alone with a parent was just under one hour per day.

In the winter, eighteen of the twenty children completing the diary had siblings. Almost three-quarters of the children (72%) spent some time with a sibling, an average of 1.5 hours per day. Half of the children also spent time with friends; an average of 2.25 hours during the day. This could be, for instance, visiting with a friend, having a friend come over, or time spent at girl scouts or on a team.

Relatively few children mentioned spending any time alone with adults. Six children mentioned spending time with mother, two children mentioned spending time with "parents," and no child mentioned spending any time alone with father. For these eight children, the mean time was about 1.5 hours. Thirteen out of the twenty children wrote that they spent time with "family," an average of two hours per day. The little contact with adults, at least as was reported in the children's diaries, confirms the findings of a large scale time-use study of sixth graders in Oakland, California, conducted by Medrich (1982) and his associates. According to a study by Szalai, Converse, Feldheim, Scheuch, and Stone (1972) of working mothers and fathers who kept time budgets, parents in the U.S. averaged only sixty-two minutes per day with their children. Fathers spent an average of only twelve minutes per day with their children. Employed mothers spent more time with their children than employed fathers did. One must take into account the work patterns of the parents in our sample when considering the kind and amount of parent-child interaction that takes place. The diaries were written during four week days (in the summer as well as the winter), and seventy-five percent of the mothers of this group of children work outside the home during the week.

Children's Summer Activities. We had asked the children to write down everything they did during the day starting from the time they awoke until the time they went to bed. Consequently, they all wrote down each day "woke up." Some items of daily routine, such as "ate dinner" and "went to bed" were mentioned quite frequently. During the school-year, "going to school" was the most frequently written entry. For the purposes of analyzing the range of activities, we did not include daily routines of eating, hygiene (e.g., brush teeth), sleeping, or in the winter diaries, going to school.

In the summer, watching television was the activity mentioned most frequently by the children. Nineteen out of the twenty children reported watching television (the other child's family didn't have a working set). The children watched an average of a little over three hours per day. Other items mentioned in order of decreasing frequency by the children were: playing inside, doing chores, reading, going shopping, going swimming, and cooking. It is also important to make note of activities that the children did not mention frequently in their summer diaries. While watching television was listed over two hundred times in the one thousand diary entries and doing chores was mentioned fifty times, in comparison, going to the YMCA or a youth center, going to movies, going to a lesson or a sports event or a museum were rarely mentioned.

Children's Winter Activities. During the school year, the children were awake and out of school an average of almost eight hours per day, an average of 1-1/4 hours before school and 6-1/2 hours after school. In the winter, after "go to school," watching TV was again the most frequently mentioned activity, with an average of approximately 4 hours per day (see Table 3-8). It is noteworthy that in our interviews with the children, only four of them (13%) said TV watching was their favorite activity.

All twenty children both wrote in their diaries the times of their TV viewing and also checked it off on the check list (eighteen checked off "watch TV" and 16 wrote it in their diaries on all four days) (see Table 3-8). Four children watched in the morning before school, most children watched it for at least a portion of the afternoon when they got home from school and before dinner, and virtually all watched it in the evening during "prime time" hours. Children's TV viewing, according to their diaries, ranged from 3/4 of an hour to 6 hours per day. Given that most of the children are home about six hours from afternoon until bed time, some are spending most of their out-of-school time in front of the tube. A more complete analysis of the children's television viewing will be discussed in the final section of this chapter. Other studies (e.g., Medrich et al.; Lyle and Hoffman, 1972) have also found that of all activities, children spend the most time watching television. It seems to be the activity most fully integrated into the daily lives of children.

Other activities the children mentioned in their winter diaries were (in order of decreasing frequency): going to friends' houses or having friends over, playing inside, talking on the telephone, reading, doing homework, doing chores, and writing. The children said during our interviews that their favorite thing to do after school was "playing," followed by "seeing friends," then "watching TV," "drawing," and "reading." Forty percent of the mothers told us that their children spent most of their time playing with other children, another 28% of the mothers said watching TV.

We found a wide range in the kinds of activities the children listed as well as in the detail and form of their diary entries. One second grader's entries from 7:00 a.m. to 9:00 p.m. are typical of several children from all grades: "woke up, school, homework, watch TV, had supper, watch TV, took a bath, went to bed." An active fourth-grade girl's entries from 3:00 p.m. until she went to bed were: "went to store, played with dolls, talked on telephone, twirled the baton, played with dolls, talked on phone, used the computer, did homework, ate supper, watched TV, played with computer, read a book, got ready for bed, went to bed."

One sixth-grade girl's entries were extremely detailed and included names of TV programs. Another sixth grader's entries, "poot the TV on," "went to tooter," gave a clear indication of her poor spelling and lack of academic achievement.

Some of the entries turned out to be humorous to us, such as a fourth-grade boy's "got into a fight outside with an enemy"; or a fourth-grade girl's "wash my face, put my clothes on, fast glass of

Table 3-8

Frequency of Selected Activities Checked on Winter Diary Checklist

Activity	# children	Number days item checked on list			
		4 days	3 days	2 days	1 day
Watch TV	20	18	-	1	1
Play	19	11	4	3	1
Homework	18	6	5	2	5
Have a friend over/ go to friend's	16	4	2	4	6
Read	16	3	8	3	2
Chores	13	4	3	3	3

Frequency of Selected Activities Listed in Winter Time Allocation Diaries

Activity	# children	Number of days written in diary			
		4 days	3 days	2 days	1 day
Watch TV	20	16	1	2	1
Play	20	12	2	3	3
Homework	11	1	4	3	3
Read	4	-	2	2	-
Chores	6	1	1	2	2

milk." A sixth grader wrote "went to bed in bedroom with my kitten." The content of the children's diaries often reflected the information we had gathered about the family during our interviews with the children and their parents. One fourth grader's diary confirmed how active his mother said the family was in the evening, even on schoolnights. One evening, after watching TV and eating supper, this child wrote that he went to a department store, then over to his mother's friend's house, then played. On another school day his diary entries included "I went in town (at 3:00 p.m.), I ate at Burger King, I went to a car dealer, I went to Sears, I went to my mother's friend's house, I left to go home, I watched TV, I went to bed" (at 10:30).

Homework. In addition to television, homework was a regular feature in the lives of some of the children, especially the fourth and sixth graders. Seventeen of the children checked off "do homework" at home on the checklist (see Table 3-8), and ten children checked off "do homework" at school. Seventeen of these children wrote in their diaries that they did homework at least one of the four days. Only one child's diary indicated she did her homework at the same time every day (in this case, before supper). Three other children broke up their homework in chunks, working on it both before and after supper. Half of the mothers and two-thirds of the fathers said that their children did homework at nearly the same time every school day. This did not vary with grade level. However, only one child, a fourth-grade girl, mentioned in the interview that she had a special time to do homework. Once again, social desirability on the part of the parent may be a factor in this discrepancy.

The children's lives are somewhat routinized; however, their schedules after school and in the evening do vary. Like their homework times, for many children bed times and meal times varied considerably across the four-day period. Of the twenty children sending in diaries, nine had the same or nearly the same bedtimes (mostly second graders). Six of these nine wrote down that they ate dinner at the same or nearly the same time every night.

In contrast, 78% of the 31 mothers interviewed said their children ate meals and went to bed at the same time.

Reading. Sixteen children checked off "read" on the checklist (see Table 3-8), while only four mentioned it in the diaries. These four children each read at least one half hour on two days for an average of 1.8 hours over the four-day period. It is likely that they read for pleasure. It is possible that many of the children had to do some reading as a part of their homework and thus didn't write it as a separate activity.

Chores. About 80% of the children said, when interviewed, that they had chores to do, mostly cleaning their own rooms, taking out the trash, and doing the dishes. One child said she had to fix meals for her family. Only one quarter of these chidren said they had to do chores daily, another quarter said two to three times per week, and one-fifth once a week.

Although there was high agreement on the interview questions between parents and children that the child had chores to do, many more mothers than children indicated that the child did chores every day. It seems as though there is a discrepancy between what parents and children mean by "doing chores." A mother may call "making the bed" a chore, whereas a child may not. Also, it may be that many mothers reported "every day," feeling that it was the socially-desired answer.

Information from the children's diary checklists reflected what they said in the interview. Seventy-five percent of the children who returned the school-year diary checked off "do chores" (see Table 3-8). However, only six of these children wrote it in their diaries. The time they reported doing chores ranged from 15 minutes to 3 hours a day. Chores may be one of the activities that is so much a part of children's routine or takes so little time that they don't think to write it down in the diary.

In contrast, one girl's diary indicated how much a part of the day her chores were. After school she wrote "eat a snack, put wash on, sweeping floor, out in hall talking to friend, watch TV, doing dishes, talking to dad, watching TV, talking to friend, eating supper." Another day she wrote "doing dishes, clean refrigerator, sweeping floor."

Television

Television viewing was the most regular and constant feature of children's lives out-of-school. According to the children themselves, and to their mothers, the average child watched 4-1/2 hours of television a day, with a range of one to eight hours. This figure was derived from each child's and mother's account of the child's daily television schedule. Questions were asked about viewing in the morning, after school, during dinner and in the evening; the interviewer then calculated the total daily hours from the account. Almost 90% of the children said they watched at least three hours daily and almost half watched between four and eight hours daily. Three quarters of mothers and all fathers reported that their children watched certain programs every weekday.

Television was important to the parents as well as the children. This is evidenced by the fact that all but one family in our study had at least one working TV set. The Cruz family owned a broken TV set and could not afford to get it fixed. Four families had one TV, eighteen families had two, and nine had three or more (this includes the Grant family, two members of which reported having eight TV sets). TV sets were mostly located in the living room or parlor.

In 17 households there was a TV in the child's bedroom (usually a second set). When asked "who watches TV most in your family?" half of the children answered "me" and another quarter said a sibling. Significantly more second graders than either fourth or sixth graders said they watched most often. Children, mothers, and fathers generally agreed that the mother watched least often of all family members. Many of the women indicated that they had other, more important activities or that TV bored them. However, virtually all mothers, as well as fathers, watched at least an hour or two of TV per day. Four women and three men watched four or more hours daily.

As the day goes on, the number of children who watched TV increased. Sixty percent of the children reported watching in the morning before school and 83% reported watching when they came home from school. Over one-third of the children said they watched regularly during dinner, and half of the children said they sometimes watched during dinner. Virtually all the children watched in the evening after eating.

The "wasteland of Saturday morning TV" is a weekly staple for many of these children. Eighty-five percent reported watching the Saturday morning cartoons, some starting as early as 6:00 a.m. and many watching all morning and into the afternoon.

Children were evenly divided on whether or not they were allowed to watch TV any time they wanted. Of those who reported time restrictions, a third each cited these limits: "If homework isn't finished," "after a certain hour at night," or "if I'm being punished." Mothers and second and fourth graders agreed on whether the children could watch any time.

About one third of the children reported being able to watch whatever they wanted while the other two-thirds said they were not allowed to watch certain programs, ones with violence or sex, and R-rated movies.

Of interest is the fact that it was the majority of fourth graders - but only half of second and sixth graders - who mentioned having restrictions. This is not unusual since second graders, who tend to go to bed earlier than older children, aren't awake for the "adult fare." Sixth graders, on the other hand, may have fewer restrictions on content because of their age. Mothers were more likely to say there were content restrictions than were children.

Most families got some sort of television program guide (e.g., TV Guide, Sunday newspaper guide) on a regular basis. However, many didn't use it in deciding which TV program to watch. The majority of children either just flipped the channels or else had favorite shows they watched every day or every week. Many of these programs were re-runs (e.g., "Brady Bunch," "Good Times") or cartoons which the children had seen before. Nonetheless, 70% of the children liked to "just watch" rather than do something else while watching. The other 30% said they sometimes liked doing other activities while watching, such as playing games, eating, or reading. One-third of the mothers said their children watched TV and read at the same time. One third said the children watched TV and did homework simultaneously; however, no mother of a second grader but half of the mothers of fourth and sixth graders said their children did both.

Favorite TV characters most often mentioned by the children were cartoon characters and male action-drama characters. However, situation comedies were named most frequently as "favorite TV program" and "program you enjoy watching the most." The distant second-place choice was cartoons. Given the large number of sit-coms on TV, there isn't much variety from which to choose. Children liked these programs because they thought they were funny and entertaining. Least favorite programs mentioned were soap operas and news. Most children said they were boring or uninteresting, although at least one sixth-grade girls watched General Hospital faithfully every day.

Most children mentioned some TV programs which their whole family watched together. Mostly prime-time situation comedies, G-rated movies, action drama and occasionally cartoon specials were cited. Fewer than half the children said they had bought a book or had taken one out of the library that had to do with a TV show. Only a handful of children mentioned a children's classic; the others mentioned comic books.

We introduce you now to three more families in order to illustrate the different ways in which families organize their children's daily lives and the kinds of literacy environments they provide for them.

The Boudreau Family

Marie, a shy, polite, pretty seventh grader, lives with her mother, older brother and twin sisters on the second floor of a triple decker house in Righetti Field. Her grandmother and aunt live in the apartment downstairs. Marie's parents have been divorced for several years. Her father lives in a nearby town, and she currently sees him about once a week when he takes the kids out to eat or to the movies. Marie's paternal grandparents also live nearby and she visits them often. During the past year the family has devoted a great deal of time to the aunt downstairs who has been very sick.

The Boudreau's house is neat, pleasant and well-furnished - giving the appearance of better financial circumstances than many of the other families in our study. Mrs. Boudreau works part time as a dentist's receptionist, but manages financially without any support from her former husband, partly because her family owns the building she lives in. Her family also owns the cabin at a lake where the Boudreaus spend the summer months, and provides occasional luxuries, such as a week-long trip to Disneyworld and a color television, they wouldn't otherwise be able to afford.

During our interviews Marie initially appeared almost unfriendly, yet cooperative. In the course of the conversation, a thoughtful child emerged who answered questions with care and expressed more interest in the purposes of the study than did most of the subjects. Marie is considered hard-working, well-adjusted and independent by her teachers. Her mother describes her as independent too. But Marie acknowledges her mother's greater wisdom and experience, and chose her as "the person I admire most."

Marie lives somewhat in the shadow of her older twin sisters, Denise and Debbie, who are attractive, out-going, capable high school seniors who will be studying at a local college next year. Denise is considered the best student in the family and Debbie the most athletic -- even more so that Marie's older brother Gary. Debbie has been on the softball and volleyball teams throughout her high school career, and she has encouraged Marie to be active in sports too. This year Marie has been on the volleyball team at school. She also takes gymnastics lessons once a week, as well as dance lessons and reports that she wants to be a physical therapist when she grows up. Marie's older brother Gary doesn't participate in sports to the extent the girls do, although he plays hockey on Saturdays. Gary has his own motorcycle which he keeps at a friend's house where he can ride it legally on adjacent property.

Mrs. Boudreau believes that all of her daughters are doing fine in school. Gary, on the other hand, has had difficulty in school for some time. Several years ago he was assessed for learning disabilities and is considered the poor student in the family. His mother feels he could do much better in school if he tried. His older sisters try to encourage him to study and get good grades.

The members of the Boudreau family live very separate lives. Mrs. Boudreau began her 8-2 job as a receptionist five or six years ago. Prior to that time, she stayed home with the children and was quite active with the local PTA because "it was the thing to do." The children spend much more time with their friends than they do with each other. Denise has a boyfriend with whom she spends a great deal of time, and Gary goes over to his best friend's house after school.

Marie practices with her volleyball team several days a week after school. On other days, she attends her gymnastics or dance classes. She spends the afternoon with her firends -- going shopping at Norwich mall, attending catechism meetings at church or going to the library "to hang out with boys." She usually gets home by 4:30 or 5:00. Neither she nor the other children have significant responsibility for chores at home.

The main activity the children share with each other is watching television, especially Marie and Gary. The family has two television sets, a large color TV in the living room -- which was a gift from the grandparents -- and a small black-and-white model which is kept in Mrs. Boudreau's bedroom. Marie and Gary are expected to do their homework before watching television, and Gary mentioned that TV privileges are occasionally taken away for a day or so as punishment for arguing or fighting with siblings. Mrs. Boudreau reported that two years ago, when Gary's and Marie's grades went down, she banned television on school nights, and life was much nicer, the children did more, talked more and went out more. There was some conflict then, because Marie was allowed to watch since her grades were good. Another complication in enforcing this restriction was that Gary sleeps in the living room during the winter months because his bedroom is unheated. The restrictions were lifted when the children's grades went up, but Mrs. Boudreau indicated that she would still prefer to have them in some ways.

Mrs. Boudreau watches the least television in the family. However, all the family members accept without argument the fact that Mrs. Boudreau gets to watch what she wants to watch on the color television, even if the children have other desires. (She usually lets them know ahead of time that she wants to watch something.) As Mrs. Boudreau put it: "It's my TV, I'm in charge." It's clear she is. Gary explained that among the children, "the oldest children win; Debbie & Denise wins over me; I win over Marie." For her part, Marie says she enjoys the shows that Gary watches. The two of them watch television together nearly every day.

There appears to be tension in the family over Mr. Boudreau, who recently re-appeared after a long absence. When Marie described members of her family she included her father, but the three older children left him out of their descriptions. Both Mrs. Boudreau and Debbie made negative comments about Mr. Boudreau. When asked if the children took after anyone, Mrs. Boudreau said, "All the bad things are like their father."

Debbie, perhaps speaking for her mother, drew specific parallels between Gary and her father. "Gary is like our father, he's lazy and doesn't like to take on responsibilities." Clearly Gary, the remaining male living at home, is considered the "loser" in the family — the one with the most problems at school and the least success. (He was even given the undesirable, unheated bedroom.) When we met with the family Gary was initially cuatious about talking with us but he quickly relaxed and then seemed genuinely pleased about being asked his opinions.

Mrs. Boudreau believes that both parents and teachers have to work together to help children, and that Gary's teacher had not taken the time to talk to parents about their children's problems. She reported that Gary had been telling her he was doing fine, and only when he got his report card did she discover that he was getting D's, and that he hadn't handed in his homework all quarter. She was annoyed that the teacher had not contacted her earlier. This year Mrs. Boudreau has not visited Marie's school or talked with her teacher, although she knew her because she had been Gary's teacher. She doesn't like her because "she screams at the kids." Mrs. Boudreau's idea of a good teacher is one who "doesn't mind spending extra time explaining things or doing extra work with children after school."

Mrs. Boudreau explained to us that she doesn't like to read. When we visited with her, she had the Norwich newspaper spread out over the kitchen table, but said jokingly, "I just have this here because I knew you were coming." She told us that she rarely reads a newspaper and that her sister ("who has all the brains") gave her a subscription to Time for her birthday, but even then, "I can hardly make myself sit down and read it." She was not so much defensive as resigned about her own dislike of reading, which clearly she feels somewhat responsible for passing on to some of her children. She said that Marie would never spontaneously choose to read, and added, "Of course, I never read either. The kids never see me read." The shelves in the living room were mostly filled with decorative objects and with records, though there were a few books, including a children's encyclopedia, on one bookshelf. Gary told us that the only thing he liked to read was motorcycle magazines, such as Super BMX and Action, which he looks through while he watches television. Marie said that she liked to read about gymnastics, but evidently doesn't spend a great deal of time reading outside of school. Denise reads the most of the family members.

Despite its financial circumstances and its non-intellectual atmosphere, the Boudreau family gives a somewhat "middle class" impression. The members choose not to exercise their literacy skills extensively, but they are perfectly competent to deal with the literary demands of work, home, and, in most cases, school. Books are not a source of joy or excitement, but neither are they totally strange or unfamiliar for this family. This family is one in which a child who chose to go to college and become a teacher or a doctor would not feel alienated, but in which a chile who graduated from high school and became a clerk or an auto mechanic would not be a failure. For example, Mrs. Boudreau said Gary would be a "good plumber or carpenter;" he should "marry rich." Intellectual endeavor has no particular status for the Boudreaus, either good or bad. Their major source of pleasure is social contacts with friends and extended family, and the opportunity for social contacts rather than for intellectual challenge will probably be a major basis for the children's career choices. School is expected to provide the basic skills that will give the children freedom to follow their inclinations regarding jobs and further training, not to provide enrichment, excitment, or absorbing stimulation.

The Grant Family

When asked to write a paragraph about the person she most admires, Carolyn described her grandmother:

> The best person I look up to is my grandmother, because when I want something I get it. When I'm sick she takes care of me. When I want to talk to her about something she'll listen. She is like a mother to me.

Carolyn has lived with her grandmother since she was two, and a few years later her two younger cousins, Sharon and Tanya, joined the household when their mother was divorced. The three girls and their grandmother form a close family unit. They share their house with two long-term boarders and an ever-shifting constellation of Mrs. Grant's relatives, who stay for varying lengths of time. When we first visited the family, Mrs. Grant was somewhat disturbed by the recent arrival of a 17-year-old granddaughter (assigned to her by the court) whom she felt was a bad influence on the three younger girls. During another visit, the front parlor had been converted to a temporary bedroom for Mrs. Grant's daughter (Carolyn's aunt), and two- and four-year-old granddaughters.

Mrs. Grant is a warm, pleasant, responsive Black woman who raised five children of her own before taking responsibility for Carolyn, Sharon and Tanya. She has lived in the same rented apartment for the past twenty-two years, and she is well acquainted with Carolyn's school, as all her own children, as well as the grandchildren, had Carolyn's current teacher. Mrs. Grant dropped out of school herself when she was in third grade because she had no parents and had to raise herself. She is just now learning to read in a class at work which she says she loves because the teacher is understanding. Throughout our interview with her, Mrs. Grant referred with some pride to one of her daughters as the "daughter who is in college." In contrast, Carolyn's mother was referred to as "a pain."

Mrs. Grant works evenings cleaning offices in a nearby office building. Until recently she worked on weekends, but then told her boss it was unfair to the children to leave them alone all dav Saturday and Sunday, and that she wanted to be able to go to church with them, so she was switched to a weekday schedule. Mrs. Grant works from 5:00 p.m. til midnight each day, although recently she has missed some work due to a back injury and also a heart condition. Carolyn told us that despite her grandmother's long work hours, she and her grandmother go out several times a week on errands, to go shopping or out to restaurants.

Carolyn takes after her grandmother, according to several family members. Both she and her grandmother are very sociable; both were responsive to our interview questions. Carolyn elaborated on answers and related anecdotes that the questions brought to mind. For example, she recalled in some detail what she liked and disliked about each one of her elementary school teachers.

Carolyn's friends are very important to her. Her favorite thing to do after school is visit with them. Her cousin commented on this: "Carolyn likes to go out with her friends, stay overnight, have a good time, talk on the phone." She and her friends play checkers, hopscotch and jacks or walk to the Norwich Mall. She depends on them to accompany her to the library or to give advice about good books to read. Her favorite books are those by Judy Blume, an interest she shares with several friends. During the school year, Carolyn also babysits and practices regularly with the Steppettes, a drill team.

On weekends, Carolyn frequently goes to the movies with her friends or with her cousins. She also goes out with two of her aunts - to church, on shopping expeditions, or on dates with their boyfriends. Carolyn described one of these aunts as the smartest person she knows "because she went through college and answers a lot of questions."

While Mrs. Grant works, the girls take care of themselves, fix their own dinner, wash the dishes and clean up the kitchen. During the course of the week they are also expected to clean floors and do other chores. The children are not supposed to watch television until their homework and chores are done. Then they may watch whatever and whenever they want, except when they are "out on punishment."

Mrs. Grant places considerable emphasis on the children being obedient, polite, and on not being fresh or sassy. Mrs. Grant told us, "Carolyn asks me why I have to beat on the kids, and I told her ain't no kid ever been brought up that ain't been beat on once in a while." Her expectations about what the girls are to do, when they are to be home and how they are to act are very clear to all the family members. This does not mean, however, that the girls always do as they are told. During one of our home visits the three girls were being punished with no television for having gotten home late the previous day from a visit to their uncle's former girl friend and her baby. Carolyn told us that "sometimes my punishment is no telephone and no TV and no going out for coming in late or saying things I'm not supposed to or something bad in school." Carolyn sees her younger cousin as somewhat of a tattletale and so she and Sharon only talk about "things we're not supposed to - boyfriends and stuff like that" - when Tanya is not around.

The emphasis on obedience extends into the girls' school life. Carolyn reported that her grandmother was displeased when a report came home from school that she talked too much. Generally, however, Mrs. Grant feels that Carolyn and her cousins are very good, very easy, and don't get into trouble.

Mrs. Grant believes that Carolyn is doing well in school. She says she is smart, gets good grades and is in the top reading group. She recognizes that Carolyn's favorite aspect of school is the opportunity to socialize, which is not unlike why she enjoys her own job. Carolyn plays the leader's role among her classmates and maintains a jocular, somewhat egalitarian, relationship with teachers. She tends to operate as a "teacher aide," running errands, helping out in the library, and supervising other children and as a result, frequently missed whole group lessons by being out of the room or otherwise engaged.

Carolyn has a casual, pragmatic attitude toward her schoolwork. She was one of the few children in the study who said they believed that homework was not important, although she does it so she won't get into trouble with her teachers. She and her cousins help each other with their schoolwork, even to the extent of sometimes doing it for each other. Tanya told us that the girls "switch for each other, like Carolyn will do my homework if I sweep the kitchen floor for her." Despite the fact that Mrs. Grant is illiterate, Carolyn said that sometimes she asks her grandmother for help with her homework. She draws upon other resources as well, and will telephone her cousin who lives across town or one of her classmates for help. She also gets the head of the after-school program to help her with her homework, according to her grandmother.

Carolyn's teachers have told Mrs. Grant over the years that Carolyn could try harder at school, and Carolyn told us that she knows her grandmother wishes she would work harder in school. When she brings home poor school work, Carolyn says her grandmother talks to her and tells her to do better. When she brings home good work, her grandmother gives her money or takes her out to a restaurant. Carolyn said that she liked everything about school this past year except for history, because she didn't understand it.

In the Grant house there are 11 television sets - "five TVs that the family watches, three TVs that work but they don't watch, and three televisions that are broken." Mrs. Grant has her own television set - with Home Box Office - in her bedroom. The girls are allowed to watch that set when she is home, although they are not allowed to see R-rated movies. On school nights the girls are allowed to watch television until 10:00 or 10:30. Carolyn doesn't watch nearly as much television as Tanya does.

The Grant household is one in which there are no books or magazines in evidence, and in which adults do not use literacy to any significant degree. The Grant girls need to acquire their reading skills through school; their home will support the school's efforts, but cannot in any way compensate for the school's failures.

The Simms Family

The Simms' are a very large, child-oriented family who moved to Norwich Corner from Antigua seven years ago. Five sons and daughters plus a neice live with Mr. and Mrs. Simms in a two-story apartment they bought through a government homeowners' program several years ago. Several other children live away from the family (two are in the Army). Both Mr. and Mrs. Simms like living here; they see Norwich as a place of opportunity and, as Mr. Simms says, "It's the most well-balanced community in the Union."

Education is prized in this family. The parents want better for their children than they themselves had in school in Antigua. Mr. Simms 44, went through twelfth grade; he hated it because "they'd beat you 'til you bled." He'd like to go to college here some day. Mrs. Simms, also 44, went only as far as the seventh grade because high school wasn't free and her family couldn't afford it. She faced prejudice in school because she was poor. She tries to forget about her school experiences because of their unpleasantness and irrelevance. "We learned about England and the Queen. You knew more about the Queen than about your own life." She loved to read, however.

Both Mr. and Mrs. Simms hope and expect that Joanne will go to college. In fact, it's their goal that all the children become educated. "We tend to push them. Kids are eager to learn. The teacher is a powerful weapon - makes all the difference in the world." Mrs. Simms feels that reading and math are the most important thing for school to teach. "Manners and all the others is for mother to do."

Nonetheless, respect is important - for teachers and students. "The teacher must respect herself first and then the kids and she will get it in return." Neither parent feels that parents should have more control over schools. It would be chaos and "each parent would go with a different idea," says Mrs. Simms. Both Mr. and Mrs. Simms warmly encourage all their children, but particularly Audrey and Joanne - the achievers. "You must always try for the best," Joanne's father tells her. When she brings home good work they say, "keep it up." Father feels "the most important thing is that Joanne has gotten out of her accent."

Joanne had problems adjusting to the first grade because of her West Indian accent. She had stayed with her aunt in Antigua when Mr. and Mrs. Simms first came to the U.S. and then arrived just before kindergarten. She was shy then and little for her age. Joanne still gets teased by all the family members because she's "the little one in between." Joanne does well in school now, according to her mother, her father, and her teacher. "Joanne wants to do well."

Because of their work schedules, Mr. and Mrs. Simms feel there really isn't much time for them to participate in Joanne's school experience. The parents are generally uninformed about PTA or class meetings and neither knew the name of Joanne's teacher. Mrs. Simms said: "I can't get into going to the school - they say they want parent involvement, but I couldn't do it. I care, but I must work for a living. I don't know much about what's going on." She doesn't know what Joanne likes best about school "because Joanne doesn't talk about it, only that she likes it and doesn't like to be absent." Occasionally, Mrs. Simms will make a "sudden visit" to the school to see how Joanne is doing.

At home, Joanne is a teacher to her two younger siblings. Although her older sister, Doreen, has primary responsibility for child care, Joanne, also helps take care of the younger children. Mrs. Simms doesn't like the kids to be alone; she likes them to be supervised. All the children are expected to do chores around the house, although father doesn't expect as much as mother does. Joanne's jobs are to vacuum, dust, clean her room, and help with the dishes. Since both Mr. and Mrs. Simms work long hours outside the home, they have placed much trust in and responsibility in the older children.

Mrs. Simms works the 3:00-11:00 p.m. shift in the food service line at a local hospital. Joanne and her younger siblings see their mother just one hour before school and a few minutes when they get home, just as Mrs. Simms is taking off for work. Mrs. Simms always cooks dinner and leaves it for the family. Mrs. Simms is tired in general, and she's tired of her role as mother. "I was a mother for a long, long time - to my younger sister." "That's my life - house, work, kids, house, kids, work. I can't stop working. We're not eligible for food stamps or AFDC. The job keeps me going and it pays for the kids' clothes." Mother works hard and tries her best. She often feels depressed, but tends to work out problems on her own. She doesn't get much fun. "My husband ain't a man to take you out. I go out with the kids."

Mr. Simms is a hard-working appliance repairman who likes his job. "Every day you work on a different problem." He gets home around 7:00 p.m., sometimes eats dinner with the children, and then spends the evening with them. After dinner he reads to relax.

This is a family of readers and the house is full of books. Mr. Simms isn't the only one who enjoys this pastime. Mrs. Simms loves to read, particularly books on black history and personal accounts of black women, as well as novels. She's one of the few mothers in our study who could reel off several titles and authors she enjoyed. She also knows the names of books and authors that Joanne reads. Joanne reads a lot—according to her own account, and that of her father - about two hours per day. Audrey makes the younger children read for at least half an hour a day. She also makes rules about television - telling Joanne and the others when they can watch. Joanne loves watching TV, but reads during the commercials. The color TV is only brought out on Sundays, "for the whole family to watch together."

Audrey is clearly seen as the scholar in the family, "she's very quiet like her father - the only two," says Mrs. Simms. When asked, "Who's the smartest person you know?" Joanne mentioned her sister, Audrey. Doreen is athletic, taking after her mother (who jogs regularly and who greeted us once after her morning run). "She's the only one who takes after me," Mrs. Simms says of Doreen, "in looks, voice, manner. I see myself growing up in her." Doreen and Audrey work to help contribute money to the household. They're involved in sports and with friends. The older kids keep close to each other, they have their own lives. Mrs. Simms says wistfully, "They don't need you." Mrs. Simms thinks that Joanne "doesn't take after anyone but herself," but she gets along with her sisters. She and Doreen share a room and are close.

On weekends, Joanne goes grocery shopping with her mom and they walk to Norwich Corner. Sundays they go to church. Joanne "has her own adult friends at the church" and gets along well with them and with other children. She's very active - plays a lot with friends and with her siblings, plays with dolls (there is a large collection of big stuffed animals in the living room), roller skates (a passion of hers - she is allowed to do it every day but Sunday), and reads. An important activity of hers is being on the drill team at school; she practices every day. She is also learning the violin, which is rented from the school. Mrs. Simms says of Joanne: "She can do lots of things well."

Both parents would like Joanne to "get a profession - not just a job" but that it should be her choice. Mr. and Mrs. Simms are concerned about all their children's futures and are trying their best under their financially difficult circumstances. The encouragement and love they display is evident. Joanne summed it up well; she looks up to her mother and father because "they are the ones that beat all those TV stars, the storybook people and the sports people. And you can trust them without a doubt. If they gave me something they won't be expecting anything back from me. What they do for me I really admire them for."

Chapter 3

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Chapter 4: The Schools

Children in our study were part of a school system with a better-than-average reputation in the area. Norwich spends more per pupil in the elementary grades than all but five systems in the state; Norwich's teachers' salaries are among the highest in the state. While K-8 neighborhood schools have traditionally been the bedrock of the system, declining enrollments and pressures for greater racial balance have brought changes. In the first year of our study, nearly all our subjects attended elementary schools in their own neighborhoods (two Black children took advantage of open enrollment policies and were bused to a school in an overwhelmingly white district). District lines for three of the four original schools in our study had just been redrawn, in some cases changing the neighborhood identity of the schools. Thus as the first year began, some children were in classes where teachers had taught their older siblings and even, in two cases, their mothers, while others were in schools that were new for them and unfamiliar to their families.

School Descriptions: The Hurley, Roosevelt, Sumner, Alcott and Bates

The Hurley is in many respects the most traditional of the schools we studied. Relatively unaffected by systemwide changes in assignments, the Hurley district takes in both a lower-middle-class white residential area and ethnically mixed streets of deteriorating housing. Community ties are strong; several of our target children's teachers live in the neighborhood around the Hurley and a greater number grew up there. While about 40% of the children attending the school are Black or from other minority groups, the staff is almost all white. Staff-community links are stronger than at many Norwich schools, but these ties are largely with the whiter and more affluent sections of the community. The Hurley does act as a center of city services for the whole neighborhood, incorporating playing fields, a tot lot, a public library and health clinic.

The Hurley's classrooms, with few exceptions, are bleaker and less well equipped than target children's rooms in other Norwich schools. While the building is clean and pleasant, classrooms often lacked resources beyond the basics of texts, blackboards and desks. Few Hurley classes had substantial classroom libraries; only two of the sixteen rooms we visited had activity centers. Children's work is displayed in the corridors, often quite formally in glass cases with teacher-made headings and decorations. Displays inside the rooms were usually limited to commercially-produced posters and charts.

Focal children attending the Hurley took fewer field trips than the children we followed at other schools, but had more frequent class visits to the library. The presence of a city branch library adjacent to the school may have facilitated this. Hurley teachers describe classroom activities as adult-centered about 85% of the time, a higher average than most of the other schools in the study.

Mothers of focal children at the Hurley gave teachers higher ratings than mothers with children at other Norwich schools, more than half of them rating their child's current teacher as "very good." They were more critical of buildings and equipment, only one mother giving the Hurley's a better-than-average rating.

The Roosevelt School maintained its distinctive style despite two years of changes in enrollment policies. In the first year of our study, focal children at the Roosevelt were in classes that were 87% white. Some 23% of children in Roosevelt classes we studied came from homes where English wasn't the primary language. One measure of the relative poverty of the surrounding community: Teachers at the Roosevelt were more apt to characterize their students as exclusively lower class than teachers at other schools.

Roosevelt teachers, like those at the Hurley, describe their lessons as "teacher-directed" at least 85% of the time. Reading instruction was more skills-based for our Roosevelt teachers; all of them mentioned having a specific skills focus like word meaning or literal comprehension, compared to only two-thirds of the other project teachers. In the first year of the study, reading periods were also much longer, an average of 270 minutes per week, according to teacher reports, at the Roosevelt, compared to 150 minutes or less at the other schools (this was not the case in the second year when all the schools in the study had a similar 150 minute norm). Five of the seven classrooms we studied at the Roosevelt made generous provision of materials beyond texts. These rooms included math and science activity centers, aquariums, classroom libraries, teacher- and student-made charts and games. Target children at the Roosevelt visited the school's well-stocked and attractive library every week. They were also more likely to use trade books in reading class than our other subjects: Every one of the teachers reported including these in her reading program.

In the second year of the study, the Roosevelt was paired with a majority Black school in an effort to reduce racial isolation. Although this was the second change for some of our focal children in as many years, the transition to a merged distract was a smooth one; for example, one of the white Roosevelt mothers in our study continued to work as a volunteer in the primary program, this time in the "other" neighborhood. A white Roosevelt teacher who'd been initially quite hostile to the move was enthusiastic about her new colleagues and surroundings by midyear. However, the uncertainty involved in redistricting may have been responsible for two of our Roosevelt subjects, both Black, transferring to a parochial school.

Mothers of target children at the Roosevelt gave teachers and facilities average or better-than-average ratings, and more Roosevelt parents were active in school programs than parents elsewhere. The Roosevelt was also the only school in our study where every family was contacted at least once by the child's classroom teacher.

Children at a third Norwich school, the Sumner, were the most seriously affected by changing enrollment policies. At the beginning of the first year of our study, district lines for the Sumner were redrawn to take in more white students. Two of the seven focal children at the Sumner were newly-assigned as our study began; one of these children's mothers, a Black woman, was critical of the quality of education at the Sumner and told us she almost decided to keep her children home in protest over redistricting. The enrollment in target children's classes this year averaged about 25% Black and 59% white.

The Sumner was housed in an older, rather battle-scarred building, with a dark, high-ceilinged interior. Some teachers whose classes we visited had made an effort with their rooms, displaying children's art work and bright posters. However, none of the Sumner classes in the study had a substantial classroom library, and none provided materials beyond texts and publishers' skill kits. Relative to teachers at other schools, fewer Sumner teachers mentioned emphasizing specific skills in their reading groups. Teachers described their lessons as adult-centered only 65% of the time, on the average, the lowest proportion for the schools we studied. Sumner children had more field trips - two or three a year - than children elsewhere, and they had the second-highest average number of library visits, according to teachers.

Parents with children at the Sumner gave fewer positive ratings to teachers and facilities than did other families in our study. At the end of our first year, when the city announced plans to close the school, Sumner children were offered seats at citywide magnet schools. Six of our target children were assigned to the innovative Alcott school; one chose another, more traditional magnet program. One Sumner mother, who'd been quite articulate about deficiencies in the old school, joined a parent planning team at the Alcott. Other Sumner parents were hesitant to get involved; one mother described herself as confused by the changes and another said she was reluctant to commit herself when her children had been transferred twice in two years. Yet another former Sumner parent described the Alcott as "messed-up" and missed the Sumner principal's presence.

The Alcott offered a markedly different program for middle-grade students but an upper-grade curriculum rather like the Sumner's. Two Alcott teachers described their lessons as adult-directed 85% or 90% of the time, while another two, both teachers of younger students, characterized theirs as more child-directed. All the Alcott teachers used trade books as materials for reading lessons and organized frequent and varied writing activities.

The transition to the new school was difficult for most of our Sumner subjects. Teachers at the Alcott, perhaps used to dealing with students that were more middle class, gave our children lower skills ratings than the Sumner teachers had done. They were less likely to expect our subjects to go on to college than the Sumner teachers, and had, according to their questionnaire responses, fewer contacts with focal children's families.

The last of our four original schools, the Bates, serves an ethnically diverse neighborhood of two- and three-family homes and subsidized housing projects. Classes our focal children were assigned to at the Bates mirrored the racial mix of the system as a whole: about 50% white, 36% Black, with the rest other minority groups. Although some predominately Black streets were added to the district in the first year of our study, the Bates had a stable enrollment across the two years.

Instruction for focal children at the Bates was fairly standard for Norwich elementary schools. Teachers described their lessons as adult-directed about 80% of the time; reading was taught in ability groups using basal readers and skills workbooks. Although the rooms we visited at the Bates had sizeable classroom libraries, teachers didn't consider trade books part of their reading program. Children took one or two field trips each year but made many fewer library visits than the norm for our study: Bates children averaged fewer than ten a year, according to teacher report. Bates teachers also reported making fewer contacts with target children's families than teachers at other schools.

Mothers of target children at the Bates gave generally positive ratings to teachers, in proportion to the average for our sample. Their ratings of schools buildings and equipment were much higher than the norm, evidence that parents appreciated the relatively modern and well-kept Bates facilities. Many more Bates parents, 57%, compared to parents of children elsewhere, 18%, included "discipline" as an important goal for schools. We lack real evidence about the direction of influence but observers felt that the Bates made more of an issue of discipline than the other schools in our study. Discipline problems were the only reason Bates teachers gave for contacting parents of focal children, and Bates classrooms we studied had more rules and more sanctions for rulebreakers than others did.

Portraits of Three Classrooms

Descriptions of five Norwich schools support the notion that schools have distinct identities, in Waller's (1932) words, "separate cultures." While the contrast of weekly library visits at the Roosevelt with very infrequent ones at the Bates may be relevant to understanding patterns of literacy acquisition, such clear-cut school contrasts are limited, at least in our study. Sixth grade classrooms that we visited resembled each other more than they did second grade rooms in the same school. Schools that we characterized as very traditional included teachers who were among the most innovative in our sample, and in schools with generally low levels of parent involvement, some teachers broke the pattern.

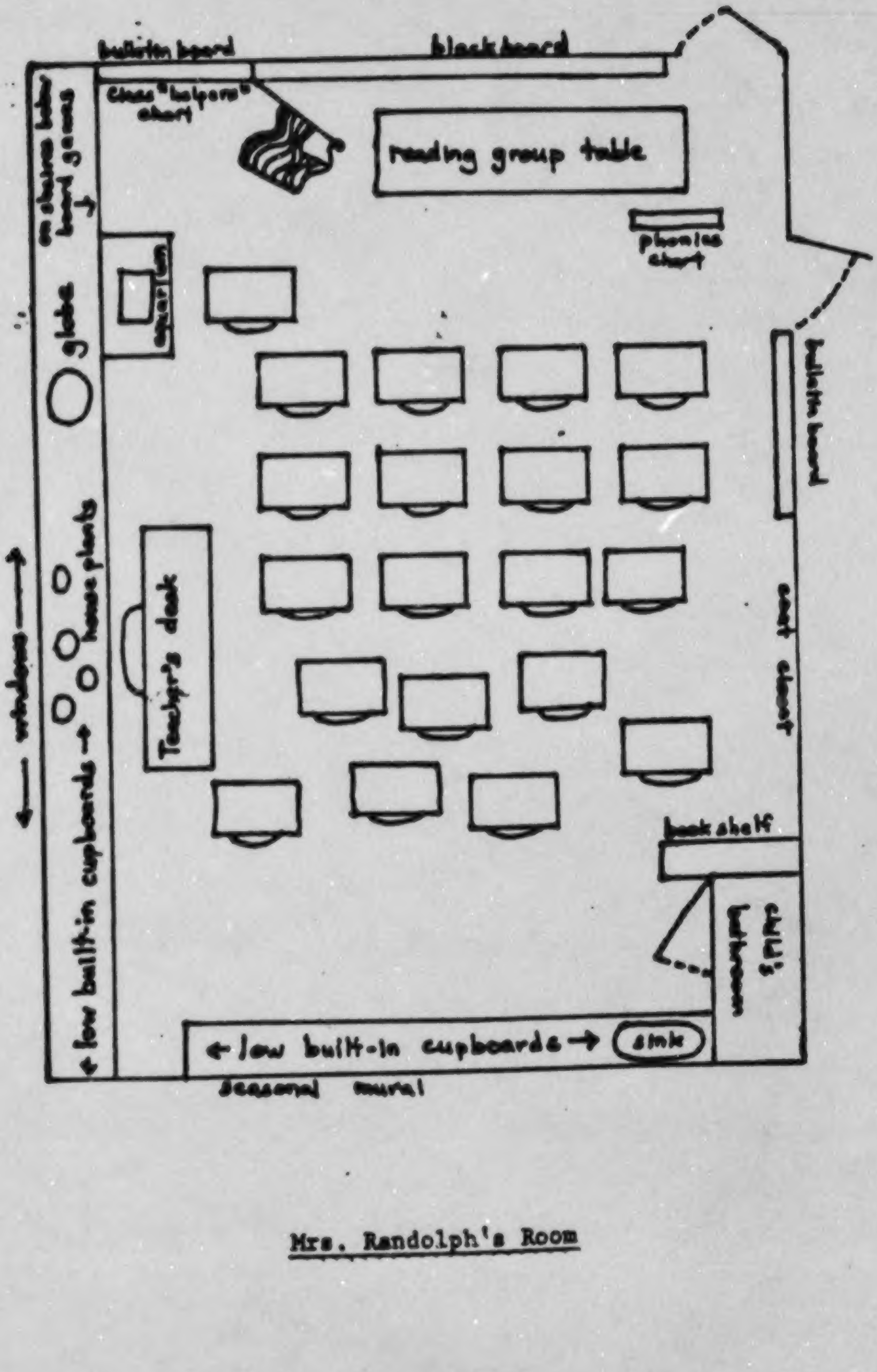
Schools' roles in fostering literacy development in particular center on the provision of varied and appropriate materials, the structuring of what Griffin (1977) calls "reading events" and the actual content of instruction in reading and writing. Individual classrooms varied more along these dimensions than schools in our study did. In some important respects, specific instruction in comprehension, for example, there was very little variation, at either level.

The portraits that follow are of three different classrooms; they represent the varied types of literacy environments that we encountered in the Norwich school. The classroom portraits are composites with some details changed to preserve anonymity of participants.

Mrs. Randolph's Third-Grade Class

Kitty Randolph's class resembles the majority of rooms in our study: traditional and competent teaching in a fairly limited classroom environment. Mrs. Randolph's teaching is a well-practiced performance. The children know exactly what is expected of them and they do it smoothly, often in unison, without hesitation. After completing independent work, for example, children put their papers in different envelopes marked "language," "spelling," "phonics," etc., depending on the workbook each paper was taken from. Mrs. Randolph often makes learning activities into games or routines - for example, in a spelling lesson described below. We saw a vivid instance of this game format when she led children in reciting multiplication tables while doing stylized calisthenics in unison - touching shoulders, waist, knees and toes. The children are businesslike and task-oriented in Mrs. Randolph's room because she is. Within this structured framework, there is still room for personal exchanges. For example, in reading lessons she follows the teacher's guide in the basal series carefully. Yet she also has an easy and cheerful manner with the children and engages them in conversation about their own experience as well as questioning them systematically to check understanding of the text. The children seem to be involved in activities and take pride in knowing the right answers.

Mrs. Randolph is a stylishly-dressed Black woman in her thirties, who projects an attitude of competence and authority. When we entered her third-grade classroom one day in February, she was seated at her desk, looking out over the 20 children sitting quietly in five rows of desks. She was wearing a starched blouse with a little ruffle and a red bow at the high neck, a navy wool pleated skirt, and red high-heeled pumps. Behind her was a long wall of windows with built-in shelves underneath. On the shelves were jigsaw puzzles and games like Scrabble, Boggle, and Quizmo; the counter top that ran the length of the room was empty except for a globe and an array of house plants. The short wall to the right of


bulletin board
blackboard
Class "helpers" chart
reading group table
phonics chart
on shelves below board games
aquarium
globe
bulletin board
windows
house plants
Teacher's desk
coat closet
book shelf
child's bathroom
low built-in cupboards
low built-in cupboards
sink
seasonal mural

Mrs. Randolph's Room

the teacher had a child's bathroom, with a large hand-drawn label, and a sink between low cupboards. Above the cupboards was a large bulletin board with commercially-produced figures of snowflakes, snow men and children pulling toboggans, and the caption, "Winter Fun." In the cupboards were two different basal series at three different levels, basal workbooks, phonics workbooks, spelling workbooks, language/grammar workbooks, math textbooks at the third-grade level, 20 copies of Our Health and Us and of Webster's Elementary Dictionary. The long wall opposite the teacher's desk had a coat closet and a bulletin board decorated with Disney characters illustrating consonant blends, like Pluto. The front wall by the door was covered with a blackboard and a small bulletin board with a chart listing "class helpers." Above the blackboard was an American flag and an alphabet chart with script letters against a circus animal background. On an easel near the reading group table was a commercial phonics chart.

As we entered, Mrs. Randolph was saying, "Boys and girls, Mrs. Randolph needs a few minutes of peace to count these raffle tickets." She efficiently did this while the children practiced cursive handwriting, copying sentences she had written on the board about the weather. When the raffle tickets were counted and handed to a child monitor, Mrs. Randolph called the first reading group to come to the table. The seven children sat quietly with their books closed in front of them, while Mrs. Randolph reviewed the story they had started the day before. With the teacher's guide to the basal series open on her lap, she began, "Yesterday we were reading a great story. What was the name of it, Ronny?"

"The Mystery of Goat Island."

"What is a mystery, Dan?"

"Something you try to solve."

"Good. Who tries to solve it, Denise?"

"A detective."

"Who was the detective in this story, Gail?"

"Mr. Bernard."

"Would you like to be his friend?"

(All) "Yes."

"Why, David?"

"Because he made pizza for all the children."

"What do you like on your pizza?"

David volunteered, "Pepperoni."

"What kind of pizza do you like, Lamar?"

"Sausage."

Mrs. Randolph smacked her lips and said, "Thursday was a strange day. What did Mr. Bernard put on the pizza?". . . .

After ten minutes of this kind of review, she instructed the children to read certain pages in the basal readers to themselves. Several children moved their lips as they read silently; Dan followed the text with his finger. When Mrs. Randolph went next door to ask Theresa's brother why Theresa was absent that day, the children all continued reading. After returning to the reading group and waiting for everybody to finish reading, Mrs. Randolph told the children to close their books and asked them a series of questions which required factual recall of the story. Mrs. Randolph then had each of the children in turn read a paragraph out loud. When David had difficulty reading the word "suggest," the teacher waited while he sounded it out, syllable by syllable. Twice she asked children for definitions of words, such as "leftovers" and "dough" and then to expand on these, using their own experiences.

In a whole-class lesson Mrs. Randolph wrote spelling words on the board, and the children read them in unison, following the teacher's pointer. After eliciting a definition of a silent letter, the teacher nominated Julie to go up to the board and circle all the silent letters in the spelling words. Since Julie had done several correctly but omitted others, Mrs. Randolph prompted her. "What don't you hear in the word "night?"

"G-h."

"Good, honey, circle it." After Julie had sat down, the teacher said, "I'm looking for a word that is the opposite of low. If you know the word, raise your hand." All but two of the twenty children raised their hands. Mrs. Randolph called on Johnny to circle the word. The game continued in this vein with the teacher giving various cues including definitions like "something that helps tell time," antonyms like "the opposite of dark," and rhyming words. Even some of the more timid and less skillful children got caught up in the game format and waved their hands, eager to be called on. Then she said, "Okay. Mrs. Randolph is going to put ten words on the board. Your eyes are going to be little cameras. I'm going to erase one word, and then I want you to tell me which word I have erased. You'll have to spell the word that you think is missing."

After they had done this with all the words, the children had a spelling test. On a previous day the children had copied the words three times each, composed sentences with each, and done workbook exercises involving the words. Thus, before taking the test, the children had practiced the words several times in various contexts.

This self-contained classroom was a safe and predictable environment, a factor of particular benefit for one of our focal children from a chaotic home. The climate of this classroom also encouraged participation by children who may have lacked self-confidence and initiative. Because so much time is spent in Mrs. Randolph's classroom learning how to perform within her particular formats, much of what children are learning may not transfer to other situations.

The view of literacy in Mrs. Randolph's class can be summed up as "literacy is what you do in school." The curriculum was pretty well determined by texts and workbooks. Each day's lesson was predictable because it would be based on the next two pages in the spelling workbook, the math book, and so on. This was not an innovative classroom or one which provided a rich enviornment for literacy; there were no trade books and creative writing was not a frequent activity. However, Mrs. Randolph got a lot of mileage out of the limited materials she did use. Conversation and especially her oral structuring of experiences became almost part of the "text," for example, in the reading lesson just described. At the same time, children's written and verbal expression was circumscribed and designed to serve fairly narrow goals, often those listed in the teacher's guide.

Moreover, not only the teacher's discussion of the text (tied to the children's everyday life: pizza, leftovers, etc.), but also the general level of "culture" in the classroom (circus animals, snowy days, Disney characters) was pitched to the children's limited world and did not extend their store of general knowledge.

Ms. Pasquale's Fourth Grade Class

Ann Pasquale's class represents a very different literacy environment from most rooms in our study. Although her class is exceptional, seven other rooms we studied had important features in common with it: generous provision of materials beyond texts and workbooks, frequent writing activities, and goals for reading that include enjoying books and communicating about them in diverse ways.

Ms. Pasquale's lessons combined fairly old-fashioned instructional techniques with high standards for student participation and imaginative activities.

When we first visited her fourth-grade class, it was late morning, a drizzly February day. Ms. Pasquale was standing in the center of her room speaking very softly so the nineteen children scattered at different tables could all hear her:

"This is an exercise in writing directions, in using our memory to describe how carrots are peeled. It's an exercise in using your memory. We'll use real carrots tomorrow. It's really hard to do it perfectly, but this will be sort of a practice and later on we'll try doing it with peanut-butter-and-jelly sandwiches."

A child raised his hand.

"Yes, Darryl? Wait a minute, Jessica, put that radio away in your desk."

"Do we have to bring in our own carrots?"

"No, I'll bring in carrots."

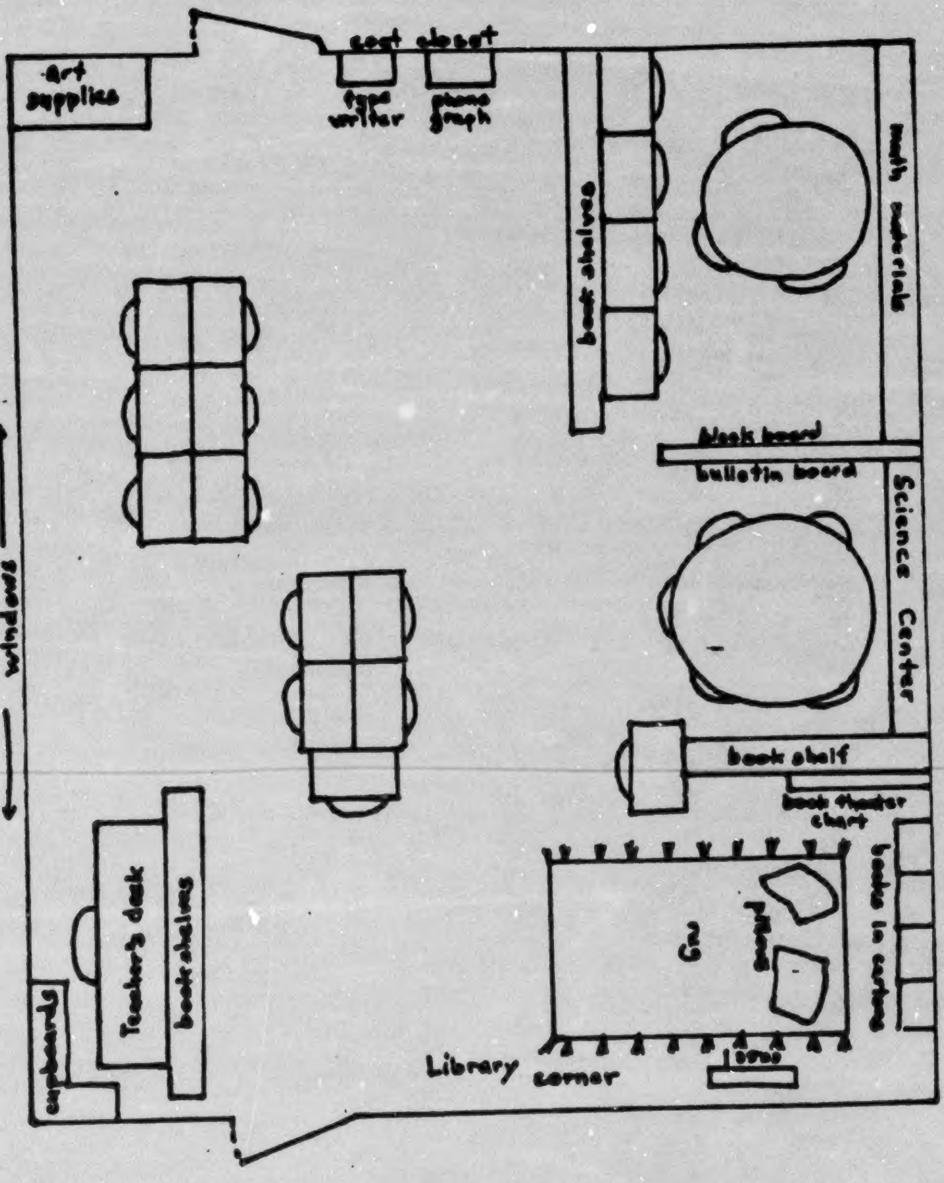
Ms. Pasquale began walking around the room, handing out worksheets she had made which asked some pre-writing questions and then left space for children's actual carrot-peeling directions. She stopped at a table where a boy was sitting by himself.

"Do you understand what you have to do, Jerome?"

Jerome nodded without looking up and began writing an answer to the first question on his sheet.

Ms. Pasquale moved over to the large round table closest to the center of the room and sat down. From her seat she began scanning the class, monitoring who was working steadily and who seemed distracted or confused.

Three children were working in the library corner, either at desks or kneeling on cushions and using the tops of low bookcases as writing surfaces. Some 600 mostly fiction, mostly paperback books were arranged on makeshift shelves. Each book had a strip of colored paper taped to its spine, with a letter representing the first letter of its title. "A" books were all in one recycled milk case, "B" and "C" books were next to them in another carton, and so forth. Scholastic and Dell Yearling fiction were heavily represented, but the collection also included National Geographic children's books, Asterix comics, crafts books, and books on the American revolution, basketball and biology. A battered old bookcase


art supplies
coat closet
type writer
phono graph
book shelves
math materials
black board
bulletin board
Science Center
windows
book shelf
book theater chart
books in cartons
rug
pillows
Library corner
Teacher's desk
bookshelves
cupboards

Ms. Pasquale's Room

separating the library corner from the work area where Ms. Pasquale was sitting held multiple copies of dictionaries, a spelling guide, thesauruses and almanacs. Two different children's encyclopedias, each missing a volume or two, rounded out the collection. A teacher-made chart stapled to one end of the bookcase announced "Book Theater: Now Appearing" and below that, "Ratings: *ok **good ***great." Brightly-colored signs in children's writing were taped underneath. Each one included a title, sometimes misspelled, often in fanciful lettering, an illustration, and the name of the child who had made it. The signs here all named biographies, including *Anne Frank*, *John Henry*, *Harriatt Tabman*, and *Bobby Orr*. Posted other places around the library corner were 17 more of these signs, these ones all representing science fiction stories (*A Wrinkle in Time*, *The Grey King*, *Dragonfall*.)

Over at the central work table, Ms. Pasquale was whispering to Tanya, "What do you need before you start?"

Tanya said, "A carrot? A peeler?"

Pointing to an unfinished sentence on Tanya's worksheet, Ms. Pasquale whispered, "Write it here."

Behind where Ms. Pasquale was sitting there were cuisenaire rods and abacuses stacked on the bookshelf. Next to these stood several publishers' reading kits and multiple copies of writing workbooks. Low cupboards against the wall were labelled "Science," and held microscopes, simple physics kits and teacher-made activity cards. Commercial posters of the planets and of animals were hung on the wall here.

A blackboard separated this work area from a group of girls sitting around a smaller round table and a row of four desks pushed together. Ms. Pasquale's side of this blackboard was decorated with origami sculpture, children's watercolors and tissue paper collages. Over in this furthest-back work area, teacher-made and commercial math charts explained the names of seven, ten, thirteen digit numbers and beyond and rules for writing Roman numerals. More low shelves here held protractors, magnets, pocket compasses and commercial math kits. Two child-composed poems were posted along with Van Gogh, Gauguin and Degas prints with French labels in children's handwriting ("La nuit etoilee"). Large signs marked the four sides of the room: North, South, East and West.

Ms. Pasquale got up from the table where she'd been sitting with Tanya and walked over to the girls sitting in the back of the room.

"Cheryl, Karen, you've got to be more quiet. I can hear you way over where I'm sitting. Does anyone need any help?"

The girls shrugged and the teacher moved on to another work area. Behind the group of girls, children's winter overcoats and boots filled most of an old-fashioned coat closet but there was also a typewriter, a phonograph, a collection of records and art supplies with rules posted for their use. Yet another set of bookshelves here held boxes with viewing holes. Children had illustrated story books in comics style and each of twelve boxes held a different story that could be pulled through one frame at a time.

Darryl got up from his seat at the central work table and moved over to a group of five desks pushed together. Four boys were sitting here all writing quietly except for Andy. When Ms. Pasquale came by this group she asked Andy to read the directions on the worksheet aloud to her and to orally respond to the first pre-writing questions. She watched while he recorded these and then asked him what his first sentence of directions could be.

Behind the boys' seats was a teacher-made chart representing the Bermuda Triangle. Cut-out construction paper planes attached to it at different points marked spots on a grid. Each plane was labelled with a child's name. A classroom helpers' chart nearby listed these occupations: communications expert, domestic engineer, horticulturalist, media specialist, assistant librarian. Job description cards were attached; for example, "The communications expert is the person responsible for keeping messages organized. They will also give out notices or bring messages for teachers to sign."

At eleven o'clock Ann Pasquale finished talking to Tanya and walked over to the door of the room. She switched the lights off briefly and walked over to the library corner. Children pushed the papers they'd been working on into folders in their desks and moved over to the library corner, sitting in a semi-circle on a rug around Ms. Pasquale.

"O.K., I need to see Jennifer, Ayesha, Louanne, Robin and Stacey. The table you left was not in good condition."

These girls returned to their seats, quickly straightened up piles of folders and papers and ran back to the group.

Ms. Pasquale was standing at an easel, holding a red marker in her hand.

"Nice job. I like the way those four guys are sitting. We should have nothing in our hands, we should be looking up at the board. Who remembers how to spell geometry? Ayesha?"

"G-E-O-M-E-T-R-Y."

"Who remembers what geometry means? Same two kids? How about someone else? Kevin?"

"Shapes."

"Right. It's the study of shapes. What's a shape we learned?"

As the children supply "triangle," "square," "pentagon," "rectangle," etc., Ms. Pasquale writes these on the chart on the easel, including summaries of children's definitions for each one. She introduces the new term "quadrilateral" and asks several children to practice pronouncing and spelling it. She defines this term, writes the definition on the chart and asks different children to name shapes already given which are quadrilaterals.

"What did we learn about lines?"

"They have to be straight."

"Jerome, did you learn anything about lines yesterday?"

"Unhh-unnh."

"Mark?"

"They connect."

"What is the word for part of a line? Anyone remember?"

Four hands go up.

"Four people remember. How about you, Louanne?"

Louanne shrugs.

"Someone else?"

"A line segment."

"Right. Who remembers the difference between a line and a line segment?"

"It has two dots."

"Right, but what do we call those in geometry?"

"End points."

"Right, end points."

Ms. Pasquale draws a line connecting two dots on the easel chart.

"Now how do we tell one line from another?"

"You have letters."

"Right."

She draws an "A" next to one point on the chart and a "B" next to another.

"O.K., for math today we're going to finish up the paper we started Monday with end points. These are due tomorrow. Find a nice quiet place to work and continue on your end point papers."

The children return to desks around the room, pulling math folders out as they take their seats.

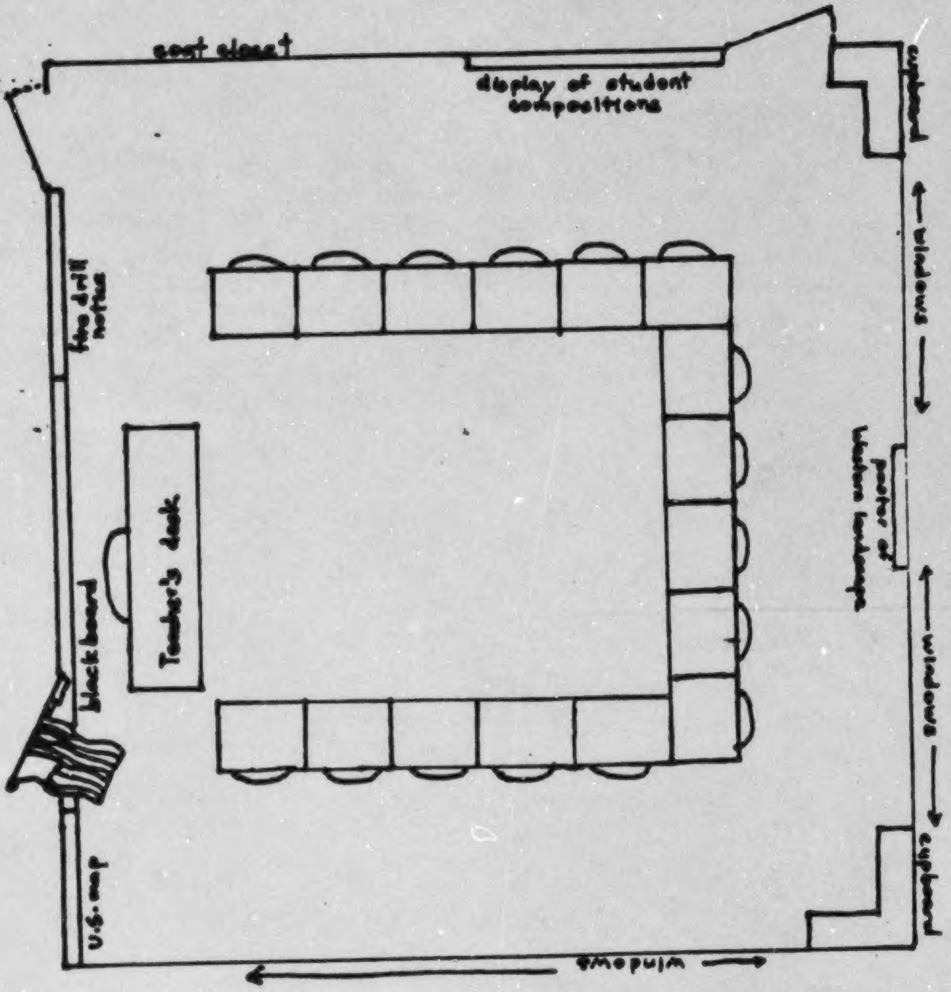
Although Ms. Pasquale's classroom might be called "open," children's activities were supervised more closely and there was more explicit instruction, both whole group and one-on-one, than in the majority of traditional rooms we visited.

Children in this teacher's class are bombarded with vocabulary, in the charts on the walls, in the novels she reads aloud each day, in the types of content area instruction that occur, like the math lesson just recounted. Children are also exposed to a view of books that is quite different from the view in many other rooms. Experiences with books are often shared with other class members, in the posters and story boxes and in book review cards, filed and indexed to the classroom library collection.

Ms. Pasquale's room provides background knowledge about worlds that may be unfamiliar to many students: Roman numerals, planets, French painters, famous people. Traditional elementary school classroom events, like the "helpers," are exploited as potential sources of new information. Standard texts and workbooks, while occasionally part of Ms. Pasquale's lessons, do not dominate the curriculum the way they do in Mrs. Randolph's room.

Mr. Barasch's Sixth-Grade Class

Mr. Barasch's sixth-grade class was typical of many of the upper-grade rooms we visited. The physical environment was quite limited, more so than any of the primary grade rooms in our study. Lessons were text or worksheet centered, with a succession of scheduled periods for each subject area. Activities seemed very familiar to the students: They often anticipated the next step in an assignment and began doing it before the teacher explained it to them, as in the reading lesson described below. The most noticeable contrast between the upper- and lower-grade rooms, however, was in children's attitudes. The enthusiasm and eagerness that


coat closet
display of student compositions
cupboard
windows
fire drill notice
Teacher's desk
blackboard
poster of Western landscapes
windows
U.S. map
cupboard
windows

Mr. Barasch's Room

was so characteristic of primary classes in our study was replaced in many upper-grade rooms by boredom and cynicism.

We walked into Mr. Barasch's room on a brilliantly sunny April day. Because his room was in a corner of the building it was flooded with light from tall windows on two sides. The teacher, a dark-haired man in his early thirties, was distributing yellow paper to a class of sixteen students. Children's desks were arranged in a large U-shape, facing the front blackboard and the teacher's desk. The only visible decorations in the room were a U.S. map attached to a front bulletin board and a commercial poster of a Western landscape, possibly the Grand Canyon, between the rear windows. A U.S. flag and a printed set of fire drill instructions flanked the blackboard; homework assignments from the previous day were chalked in at one corner. Built-in cupboards held sets of texts in science, health and reading. A side bulletin board displayed graded compositions by seven members of the class, one-or two-paragraph themes about occupational ambitions. Light green cinder blocks and a highly-polished linoleum floor reflected light from the windows. Students were chatting to each other; one group around Rene was laughing out loud as she told a funny story.

Mr. Barasch looks stern. "You've got your assignment, it's time to start."

Rene looks up at him. "I don't like yellow paper."

He replies, "Do you think I care!" and moves to the other side of the room.

Most of the class by now have opened their math books to a section on addition and subtraction of fractions. Rene gets up, walks over to another group of children, and asks, "Do you have any white paper?" She gets a couple of sheets, brings them back to her seat and distributes them to the kids sitting next to her. She raises her hand.

"Hey, Mr. Barasch, I need help on number sixteen."

He walks over to her seat and looks over her shoulder at the problem.

"O.K. We have one and two-thirds. How many thirds are there?"

"One?"

"At least! One has how many thirds?"

"Three."

He points to the fraction in her text. "And this has how many?"

"Two."

"So-oo, how many altogether?"

"Five."

He moves quickly on to help another student. Rene and her friends put down their pencils. Kerry, the girl sitting next to Rene, says, "Doesn't Pam go out with Joe now?"

"Yeah."

Pam says loudly, "No, I don't."

Kerry says, "Hey, Rene. . ."

Mr. Barasch looks up from the child he's been helping. "O.K., I'm gonna ask people to become more serious in their efforts."

Kerry, Pam and Rene are still giggling together. The girl sitting next to Pam is steadily copying answers from the back of her text.

Rene asks, " Hey, Mr. Barasch. Number twenty-two is sixth-fifths, right?"

"Right."

Rene starts talking to Pam and Kelly again. Mr. Barasch looks their way, they stop for a second, then pick up their discussion of Pam's boy friend.

Mr. Barasch returns, "I was locked into helping somebody, but you girls need to do better than that, O.K.?"

Val, who has been copying answers, sings a snatch of song in a mocking tone of voice. Rene, Pam and Kerry burst into loud laughter. The teacher comes over and stands behind Rene.

She looks up innocently. "Am I doing number 31 right?"

He looks at her paper. "How many thirds are there in one?"

Rene looks baffled. "I don't understa-and."

Mr. Barasch perches on the side of her desk. "If I take a candy bar and break it into three pieces, how many will I have?"

"Three."

"O.K., how many thirds are there in one and one third?"

Rene says, "I knew that, four."

He says, "Yeah."

She gets up to sharpen her pencil. When she returns to her seat, the teacher is looking over her paper, circling problems with incorrect answers.

He says, "Look, I'll show you a picture." As he starts to draw a strip divided into six boxes, Rene protests.

"I understand that."

He says, "What's your favorite candy bar?"

Rene says, "Snickers."

The teacher draws another strip next to the one he's drawn already and divides it into eight boxes.

"I like Snickers, too, but I broke mine into eight pieces. How many pieces would I have to eat to have as much as you?"

Rene says, "I understand, it's four for three."

The girls sitting around her are laughing out loud.

Mr. Barasch looks up. "I'm going to have to end what I can put up with now, O.K.? I don't care if it is Friday."

He leans over Rene's paper again. Rene says she understands the fraction equivalence he's just explained.

"Do you think you can handle this?"

Rene nods. Mr. Barasch walks over to his desk and Rene turns deliberately to Kerry and resumes her conversation about Pam and Joe.

At ten o'clock the bell rings and Mr. Barasch announces, "Reading time." Children who are assigned to the lower of his two reading groups form a giggling line at the door and file out into the hall, headed for the remedial teacher's room. The six remaining students take seats around one angle of the central U of desks. Mr. Barasch takes a pile of basal reading texts from the corner cupboard and pulls up his chair so he's facing the group while Kerry passes out the texts. Valerie gets up from her seat and starts whispering to Kerry.

The teacher clears his throat. "O.K., page 186. What do you notice about this story?"

He waits while the students slowly flip through their readers, looking for the page he's named. Val and Kerry are still out of their seats, but Mr. Barasch perseveres.

"What's different about the story?"

Valerie has sat down now but hasn't opened her book. Looking at Patty's text she suggests, "They're all different colors."

Donna says, "They're of photographs and newspapers."

Mr. Barasch quickly says, "Right, so they're not just drawings, they're about something factual. Before we read today, I want you to copy each of the new words from the story. I'll give you some of the definitions and the rest are for homework."

He moves over the the board and begins copying from a list he's holding: static, editorial, prophetic, ignite, ānalogy, horizontally. Next to each word he writes the page number in the text where it appears. The students make negative comments about the passage they're about to read as they copy the vocabulary list.

"This is dry."

"I hate science fiction."

"I bet we'll have to do questions."

Donna looks up. "I know what static electricity is."

Mr. Barasch replies, still writing on the board, "It's like a shock."

Donna adds, "You know what happened to me when I was ironing? I touched the top of the iron and I got a shock."

The teacher asks, "Are you sure that wasn't a burn?"

"No, it was a shock, 'cause I just touched the top."

"Let's get the words finished, Donna, so I can give the definitions to you."

Donna copies the last word and says, "Oh, I know what 'puny' is. Very small." She and several of the other students begin automatically copying the words three times each.

Mr. Barasch stops them. "Don't do that now, you're supposed to do that for homework, I don't want to have to wait while you finish. O.K., here we go. 'Ignite,' start, like a car. 'Epic,' like an epic journey, historical."

Students begin writing these definitions on their papers.

Mr. Barasch asks, "If descent is to go do-own, then ascent is to go. . ."

Patty says, "Up?"

"Right. O.K., 'conceive' means to start or think of. 'Analogy,' we did some of those once - a dog is to a puppy as cat is to kitten. That's a com. . ."

Donna asks, "Combination?"

The teacher shakes his head. "Unnh-unnh. Not exactly."

Donna tries, "Opposites?"

"No, comparison, comparing."

He sits on the edge of a child's desk and waits while the students finish writing down the ten definitions he's already given. Several students are copying from Donna's notebook, which she has passed to them.

"I'm only going to give three more - the rest of the 23 you'll have to look up in the dictionary for homework."

One girl puts down her pen and notebook and gets up from her seat. She begins demonstrating a dance for the other students. Mr. Barasch reprimands her and announces that he won't give any more definitions.

"You'll just have to look them all up yourselves. I want to start the story now. Is everyone open to page 186?"

Kerry asks, "Do we have to read aloud?"

"Yes. Donna, why don't you begin where it says, '. . . '"

"Can't we just read to ourselves?"

"Are we gonna have to do questions?"

Mr. Barasch improvises, "Why don't you just read silently, it's pages 186 to 209 and then. . ."

As he says that, the bell for the next period rings.

"We'll continue with our story tomorrow. Remember those definitions for homework."

Several things stand out about Mr. Barasch's class. The activities he has organized are totally routine. Copying and recording dictated definitions take up most of one period (and the homework assignment that follows it will involve more of this); simple computation takes up another. The level of the work students are asked to do is not challenging: simple fractions problems were handled successfully by younger children in our study: the book being used by upper-ability sixth-graders was a controlled vocabulary reader at the 6.0 level. Like factory workers with production quotas to meet, students in Mr. Barasch's class avoid working too hard or too efficiently, since that would result in more of the same work being expected of them.

Children use elements of their own subculture to enrich classroom life. Rene and her friends had decorated the insides of their desks with photographs of friends and family and clippings from popular magazines; Val demonstrates a dance. Students carry on extended conversations and fit their work into the gaps and pauses in these, the more important parts of their day. Interactions with the teacher are used to relieve boredom, but Mr. Barasch consistently underestimates children's intelligence so these exchanges aren't much help to them. He is concerned about the children being disruptive and therefore plans activities that are easy to supervise; for example, when he suggests the students read out loud.

While Mr. Barasch is among the less effective teachers in our study, the dynamics of a number of other classrooms, particularly at the sixth- and seventh-grade level, were all too similar.

Organization of Reading Instruction

Although the classes of Mrs. Randolph, Ms. Pasquale, and Mr. Barasch were really quite different from each other, a feature common to all of them was reading instruction in small ability groups.

Grouping for Reading Instruction

	1980-81	1981-82
Ability grouped	100%	75%
Top group	9	11
Middle group	11	7
Bottom group	12	5
Range of group size	1-9	1-25
Average group size	6	11.6

All our target children were grouped by ability for reading during the first year of the study. In the first year of the study teachers were most likely to assign children to groups using their own informal judgment: Informal teacher judgment was a factor in the assignment of 60% of our target children. Teachers of 38% of our children used standardized test scores, and previous teacher's recommendations were a factor in the assignment of 41%. Reading group membership changed in the course of the first year; every teacher in the study reassigned at least two children and one teacher moved nine, usually because a child's skills developed faster than those of other group members. Six of our target children were moved from one group to another this year: three from middle to top groups, and three from bottom to middle groups.

In the second year of the study, three-fourths of our target children were grouped by ability for reading instruction. Five children - all of them seventh-graders - had whole class instruction for reading; two children (both from the same school) were in classes with shifting interest groups. Informal teacher judgment was a factor in the assignment of more children in the second year - about 72%. Only two children's teachers used standardized test scores in assigning them, and only one target child was assigned on the basis of a previous teacher's recommendation. Groups, once established, were more stable this year; six of our target children were in classrooms where no student's group assignment was changed. During the 1981-82 year, three target children's groups were changed (13.6%), a proportion similar to those reported by other researchers (Hawkins, 1966; Weisendanger and Birlim, 1978). The relatively high proportion of children reassigned in the first year of the project (18.8%) may be due to the fact that our subjects were in lower grades, and lower-grade children are more likely to be regrouped (Hawkins, 1966). Five of the six children moved were in second grade. Teachers of the younger children in our study consulted more sources of information in their original grouping and were able to give us more specific information about target children's weaknesses, suggesting that primary grade teachers may have a more differentiated view of children's reading abilities, resulting in more finely-tuned and flexible uses of grouping.

In the first year of the study there was considerable variation in the length and scheduling of reading instruction. Reading periods ranged from 15-30 minutes in length to over 60 minutes, and reading groups were scheduled three to five times a week. While a 30-45 minute reading period five days a week (resulting in 150 minutes of instruction per week) was typical, five children received as little as 75 minutes and four children as much as 300 minutes per week.

In the second year of the project, there was less variation. Two target children had reading three or four times a week, but the majority had reading every day. Ninety percent of our children had a 30-45 minute reading period.

There are striking differences in the length of time teachers report spending on reading instruction for below-average compared to above-average children. In 1980-81 our below-average readers were scheduled for a mean of 132 minutes of reading instruction a week, 40 minutes less than the above-average readers received. The next year focal children classified as low readers had an average of 147 minutes of instruction per week, while better readers were scheduled for 167 minutes.

In 1980-81 all our children were in self-contained classes. With the exception of two children taught in a cross-grade grouping arrangement and one child taught in a resource room, the classroom teacher was the main reading instructor. Nearly half of the target children got some additional help in reading, in some cases from more than one source.

"Outside Help" in Reading

	1980-81	1981-82
Receiving outside help	15	9
From		
Reading specialist	10	0
Learning disabilities tutor	5	2
Title I teacher	1	6
Classroom aide	2	2
Volunteer	1	1

Only two of the children getting extra help in reading received this instruction in their own classrooms, in both cases when the classroom teacher left the room and a reading specialist took over.

In 1981-82 our seventh graders had different teachers for different subjects. Their reading teachers were not involved in planning content area instruction and were responsible for teaching as many as 120 children. Many fewer target children received outside help this year. For eight of the nine children this extra help was given outside the regular classroom.

Materials in Reading Lessons

In the first year of our study, teachers reported using basal readers with all of the focal children. Norwich doesn't use basals produced by a single publisher; we observed four different publishers' series being used. The reading level of the basals used by our focal children this year (when they were second- to sixth-graders) ranged from 1.5 to 6.0. Twenty-one of our children used readers that matched their reading level according to stardardized tests, four children's basals were at least a full grade easier than their tested ability, and six below-average readers used books that were at least a grade level harder. (None of the below-average readers used a basal that was above their measured reading level the second year.)

Materials Used in Reading Instruction

	1980-81	1981-82
Basal reader	100%	83%
Basal workbook	78%	62%
Phonics workbook (different from basal)	66%	62%
Comprehension workbook (different from basal)	47%	86%

In the second year of the project, basals were being used by 83% of target children. Use of comprehension workbooks rose from 47% of the children in the first year to 86% in the second. In both years children used an average of four types of materials in reading lessons, according to teacher reports. Materials used less frequently included trade books (half of the children each year), teacher-written stories or language experience charts (12% of children in 1980-81 and 3% in 1981-82). Only one child each year was reported by teachers as using games, puzzles, newspapers, magazines or student writing during reading lessons.

Reliance on basal readers and various workbooks is greater than teacher questionnaire responses suggest. In the first year of observations we saw only one reading class using something other than basals or workbooks; the focal children in this class were reading child-written language experience stories. In observations the second year two children, both second and third graders, were using teacher-made materials. Five children at the fifth and seventh grade levels were using trade books; four of the five were at a single school, the Alcott.

In 1981-82 when there was more variation in use of materials during lessons observed, children rated "better than average" readers by their current teachers were more likely to use something in addition to a basal or workbook. Two-thirds of the children rated "better than average" but only one third of the children rated "average" and one quarter of the children raged "below average" were using something in addition to a basal or workbook in the lesson we observed. All children assigned to a bottom reading group and all children getting whole class instruction used only basals and workbooks during the observation session. The range of activities we observed was closely tied to the materials.

Activities During Reading Lessons; Teacher Reports and Classroom Observations

The activity we most frequently observed during reading time* in the first year of the study was oral reading from a basal text (19 out of 30 children). Seventeen children orally responded to teacher's literal comprehension questions about a basal passage, the next most frequent activity. Workbook activities were common as well. We observed ten children circling words and seven reading directions and exercises aloud in workbooks. There was no oral reading in anything other than a basal or workbook. We observed very little silent reading, no instances of teachers reading stories or poems to students, and very little writing.

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*In the case of every classroom what we call reading lesson is the time in the day that teachers identified for observers as the target child's reading class. Similarly when we report questionnaire responses about activities, materials, and emphases, we rely on each teacher's definition of what constitutes reading instruction. Definitions varied: For some teachers (4 of the 34) the boundary between reading and other language arts was blurred; the majority of participating teachers, however, had a distinct conception of reading instruction as something separate from spelling, English, writing, etc.

Again in the second year of the study, oral reading from basals (15 children) and workbooks (eight children) were the activities observed most frequently during reading lessons. This year nine children were orally answering teachers' literal comprehension questions while observers were present. In contrast to the first year of the study, there was more silent reading from basals (eight children, though, surprisingly, none at the seventh-grade level) and some oral and silent reading in trade books (in each case, two children). Virtually no writing of any kind was observed during reading instruction in the second year.

Looking at frequency of activities observed across both years of the study, developmental patterns are not clear-cut. For example, more fifth graders were doing silent reading during observation periods than either older or younger students, and, surprisingly, they were doing more oral reading than any one other than the second graders. Substantial amounts of oral reading were done by 82% of the fifth graders, and by 57% of the seventh graders, but only 33% of the third graders did much while we were present.

Some developmental patterns did emerge from teacher questionnaire responses. Questionnaires gave teachers a chance to check off reading subskills they felt they emphasized in their classes. Phonics was an emphasis for a majority of second-through-fourth graders, but for only about 10% of children in grades 5-7. A critical thinking or reasoning emphasis was mentioned by teachers of over 3/4 of our sixth- and seventh-graders but for only 1/5 of our 4th and 5th graders.

Literal comprehension was emphasized by an overwhelming majority of teachers at all grade levels both years of the study. Vocabulary was emphasized for a majority of our children at all grade levels but sixth.

Although many teachers both years reported emphasizing word recognition and comprehension, we saw very little actual instruction in either.* During the first year of the study, out of the 30 children observed, only four were given a word attack strategy - for example, the teacher explaining how to break a compound word into two parts. Explicit help with comprehension, for example, drawing children's attention to meaning-bearing features of the text, was similarly rare; only three out of the 30 children received this kind of instruction while we were present. Explanations and demonstrations by the teacher were rare again in the second year of observations. None of the children in a bottom reading group and only one of the children rated below average by his teacher this year was observed in a reading lesson where the teacher explained or demonstrated a comprehension strategy. The teacher in only one bottom reading group lesson, of four observed this year, gave students word attack strategies. Our findings parallel Durkin's (1979) on low frequency of explicit instruction in middle grade reading classes. We did observe teachers going over directions for phonics exercises or exercises in comprehension workbooks, but explanations of word attack or comprehension strategies were generally limited to helping children answer specific workbook questions.

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*While we accept teachers' own descriptions of their teaching practices, the contrast between reports and observations makes clear which materials and activities were used only infrequently. Although our thirty minutes per child of reading lesson observation obviously missed things that occurred in any particular classroom, multiplied by nine to twelve children at each grade level and thirty children per year, it yields useful information about patterns of frequent and infrequent occurrences.

In the sessions observed, teachers rarely encouraged children to relate their own experiences to the text and very infrequently called attention to the relationship between reading skills and content areas. In only five sessions each year were teachers observed asking inference questions. Across the two years of the study only 37% of the children were observed in reading lessons which involved explicit vocabulary instruction, and the instruction which was given generally involved littlemore than reading or writing definitions from the dictionary.

As might be expected, giving word attack strategies and encouraging children to relate their experiences to the text were less common during observations of reading lessons in upper-grade classes and tying reading skills to content areas was more common. On the other hand, asking inference questions was no more common in higher-grade lessons observed, as might be expected. Most surprising of the grade level trends is that of the seven times teachers were observed explaining comprehension strategies, six of these explanations occurred in primary grade classes.

Focal children classified by the project as good or poor readers also received somewhat different kinds of instruction in the reading classes we observed. Compared to below-average readers, twice as many above-average readers were asked inference questions during periods observed in grade 2-4. Similarly, twice as many above-average readers had the relationship of reading skills to content areas demonstrated for them. Below-average readers in these grades were more likely to be asked to relate their experiences to the text than better readers were, in our observations. None of the good readers in grades 2 or 3 received vocabulary instruction during reading sessions observed, but almost half of the below-average readers in those early grades did. In grades 4-7, on the other hand, above-average readers we observed were somewhat more likely to get vocabulary instruction (about half of them did) than below-average readers, only a third of whom did.

Teachers were given checklists about skills emphasized for their whole class, and they were also asked whether they had a specific focus for each focal child's reading instruction. There seemed to be some relationship between teachers' mention of a particular skills focus for a child and the amount of specificity in the teacher's description of the child's weaknesses in reading.

Responses to question about a specific focus were different from those to the whole-class checklist. More second and third grade teachers than teachers at higher grade levels had a differentiated view of our children's skills weaknesses, and more of these primary teachers described their reading instruction as specifically focused. In the first year of the study, 63% of our children had teachers who mentioned a specific focus. The most frequently-mentioned skills focuses were word attack, finding the main idea, and sequencing. Literal comprehension, making inferences, vocabulary, and study skills were less common. In the second year of the study fewer children (50%) had teachers who described a particular emphasis. Teachers mentioned focuses similar to those of the previous year, but word attack was less frequently given and inferential comprehension was mentioned more often. "Reading for enjoyment" was also cited.

There were differences in whether a comprehension focus was included for above-average compared to below-average readers in the second year of the study. Teachers reported having a comprehension focus for the reading group of 47% of our above-average readers, but for only 31% of our below-average readers. In the first year of the study, however, similar proportions of high and low readers had teachers who mentioned a comprehension focus.

Other Literacy Related Activities

Although teachers and students often think of reading instruction as what happens in reading group time, many other activities in the course of a school day are related to the development of literacy. While instruction in vocabulary or comprehension may be incidental to other objectives in these lessons, they often involve the children working with written texts just as much as reading period does. Other types of activities, for example class discussions of current events, use of audiovisual materials, or field trips, can contribute to the development of background knowledge relevant for literacy. Because we considered a wide range of school activities to be related to literacy development, we observed focal children during content area instruction and seatwork, and we asked teachers specifically about writing activities, library visits, and field trips.

Most of the non-reading period literacy activities we observed centered fairly narrowly on workbook and text exercises. We didn't see much silent independent reading from content area texts or from trade or reference books related to subject areas. Twenty-one children during observations each year were working on answering text or workbook questions. Typical of these activities were third graders doing spelling exercises and seventh graders writing short answers to literal comprehension questions from a social studies text. We saw only three children the first year and two the second using trade books as part of a lesson outside reading period. The only reference books being used while we were present were dictionaries, generally to copy out definitions. There was, however, "unofficial" use of trade books, especially in some of the more chaotic classes. We saw one fourth-grade girl reading For the Love of Benji behind the cover of a comprehension workbook; a seventh grader was surreptitiously reading The Shining during a social studies lesson.

Content area instruction in English, social studies, math, and science can be important for developing vocabulary. Content area texts also offer opportunities for children to practice reading comprehension skills. While some higher-level comprehension questions - inference, main idea, sequence, etc., - were asked in the context of reading instruction, children encountered surprisingly few of these questions during work we observed with content area texts. In the second year of the study we observed 16 children responding either orally or in writing to literal comprehension questions during content area lessons, but only two children were seen answering questions which required more than a factual recounting of the text.

The kind of vocabulary instruction which takes place in elementary classrooms can be especially important for low-income children, who may not encounter as many "academic" words outside of school. Words need to be taught thoroughly, using different contexts, when the things they represent are either abstract or unfamiliar. Some teachers did this, often in unexpected contexts; for example, Ms. Pasquale's geometry lesson. Far more typical, however, was the kind of vocabulary development included in Mr. Barasch's reading lesson. Each year of the study the most frequent vocabulary activity we saw involved copying definitions from the dictionary - eight children in the first year and three children in the second were doing this during periods observed. Relating personal experiences relevant to new words, as Donna did in Mr. Barasch's lesson, was something children initiated several times but teachers rarely capitalized on, at least while we were present. Other kinds of vocabulary activities we observed included synonym- and antonym-matching exercises, filling in blanks with new words, crossword puzzles, and multiple choice exercises - all mainly workbook activities.

Writing Activities

Focal children's writing abilities are discussed below in detail in Chapter Eight; information about their out-of-school writing is presented in Chapter Nine.

Teachers in the second year of the project were asked to describe the kinds of writing they organized in their classrooms and to estimate how frequently any kind of writing was done. The forms mentioned most frequently were "stories" (16 children), paragraphs (15 children), creative writing (14 children), and sentences (13 children). Less common types included book reports (five children), news stories (four children), essays (three children), and journals (two children).

Expository writing - book reports, research projects, essays, news stories and critiques were more frequently mentioned by upper-grade teachers, as might be expected. Only 40% of our third-grade children had any of these kinds of writing organized by their teachers, while all of our fifth-grade students and all but one of our seventh-grade students did. On the other hand, writing from personal experience - language experience stories and journals - was less common in the upper grades: 40% of our third graders did this type of writing, but only one of our fifth graders and none of our seventh graders did, according to their teachers. "Unofficial" writing has been described by classroom researchers (e.g., Fiering, 1981). Even though this was not a focus of our study, it was enough of a feature of classroom life that we noted it. One below-average second-grade reader spent most of a phonics lesson copying a drawing of a television character from a magazine and composing several detailed sentences about the show he appeared in. Two high-achieving boys, a third grader and a fourth grader, drew and captioned cartoon strips while they were supposed to be working on social studies and math assignments. During a spelling lesson in Mrs. Randolph's room, a low-achieving girl composed and passed notes with riddles in them to her friend, which were intercepted by the teacher. A seventh-grade boy with very poor reading skills composed love poems. One low-achieving seventh-grade girl wrote words to popular songs that she had memorized and shared them with her friends during independent work.

According to teacher report, 25% of the focal children did school-sponsored writing less than once a month and 75% of the children wrote once a week or less. Three children were reported engaged in writing every day. Classroom observations suggest that children's school-sponsored writing was infrequent and limited in nature. During the two years, we observed only five classrooms where children were composing texts of at least a sentence. Composition activities were no more frequent at the upper-grade levels than for younger children. We saw four second graders composing "telling" and "asking" sentences, several third and fifth graders making up sentences with their spelling words, one fourth grader writing captions summarizing a film strip, and the fourth graders in Ms. Pasquale's class composing directions for peeling a carrot. We saw no seventh graders composing texts of a sentence or more in length.

While actual composing occurred infrequently during our observations, activities we call "quasi-writing" were quite common. These included filling in the blanks, circling multiple choice items, underlining or drawing lines connecting things, etc. These workbook activities were done by 19 children the first year and 9 children the second year. Other activities we observed that had this quasi-writing quality included writing word or phrase responses to literal comprehension questions, a fairly common activity for sixth and seventh graders.

Another very common kind of "writing" activity involved copying. Often children simply copied things three or four times over: a list of spelling words, a poem on the blackboard, a definition from a glossary. We saw 21 children the first year and 13 children the second year doing these sorts of activities. Sometimes copying involved an additional manipulation of the text, adding punctuation or capitalization, indenting paragraphs or copying the text into a specific format like an outline or envelope address. Ten children the first year and 12 children the second year were doing one of these activities during our observations.

Background Knowledge: Discussions, Audiovisual Materials, Field Trips

Verbal exchanges between teachers and children during observation of content lessons most frequently centered on verifying directions for completing workbook assignments or reviewing answers to exercises. Extended discussions which could develop knowledge of content area concepts and link the child's world and the world of academic subjects were rare. We observed only four teachers conducting group discussions in the two years of the study. All of these discussions involved fourth through seventh graders, and three of the four were part of social studies lessons.

Other possible sources of world knowledge include audiovisual materials and field trips. All classrooms at three of our schools - the Hurley, the Bates, and the Roosevelt - had television screens but we never saw one being used. During two years of observations only one child used any kind of audiovisual material in our presence; that was a science filmstrip.

More than other classroom resources, field trips were affected by budget cuts in the Norwich system. The second year of the study, money for buses, aides, and entrance fees was reduced. Classes at the Hurley, for example, took between one and three field trips during the first year and none at all the second year, according to teachers. In the first year of the study, all 32 children took at least one field trip during the year, but only 19 children were reported to take trips the second year.

In 1980-81 the most popular outing was to a nature area; an historical museum was the second most frequently visited place. In 1981-82 science or natural history museums were the most popular.

Library Visits

Access to libraries during school hours was affected by a number of factors. Some schools had large, well-stocked libraries within the building; some were adjacent to or within walking distance of branches of public libraries, but others had neither of these advantages. The school system provided library specialists for all primary grade classes; in some Norwich schools specialists' time was scheduled so that they could also work with middle-grade children.

In the first year of the study, all 32 of our focal children visited a library during school hours; for 19 children this was an in-school library, for nine it was a public library, and four children visited both. Teachers reported that seven children made as few as seven visits during the year; four made as many as 48. The average for our focal children was 20.5 visits in 1980-81.

In the second year of the study three of our focal children never visited the library with their classes. The children made somewhat more use of public libraries this year, with eleven visiting just public libraries. Only two children used just an in-school library, and five children visited both kinds. The average number of visits for our children in 1981-82 was 22.

Summary

Although the Norwich school system has historically been stable and well-funded, the two years of our study were difficult ones. The traditional neighborhood identities of several of our schools changed because of desegregation and district consolidation. Budget cuts affected physical education, music lessons, library services, field trips, and remedial reading.

The five main schools in our study differed in ethnic make-up, level of parental involvement, provision of classroom materials, use of libraries, and emphasis on discipline. Individual classrooms varied even more than schools did in many dimensions related to the acquisition of literacy: level of intellectual challenge of activities, variety of materials, orderliness, amount of explicit instruction, and definition of literacy.

Although teachers described a variety of materials and activities used in reading lessons, use of trade books was rare and virtually no writing was seen during our reading class observations. Like Durkin (1979), we saw few teachers explaining word attack or comprehension strategies. Workbook activities largely took the place of explicit instruction.

Although there were developmental patterns in questionnaire responses, i.e., teachers of older children said they emphasized comprehension, vocabulary, and critical reasoning more and word attack less, developmental patterns were less evident in our observations. More silent reading was seen in fifth than in sixth or seventh grade reading classes. Oral reading was still the predominant activity in fifth, sixth, and seventh grade reading lessons. Although younger children were more likely to get help with word attack strategies, middle and upper grade teachers were observed giving less explicit instruction in comprehension and were also less likely to ask inference questions than primary teachers.

The poorer readers in our study got significantly ($p < .05$) fewer minutes of reading group time, according to teacher report. In observations of lower grade classrooms, poorer readers were asked fewer inference questions. Although some poor readers in the primary grades received vocabulary instruction, they were less likely than better readers to receive it in the upper grade classes observed when word meanings presumably are more likely to pose problems.

In observations of other subject area lessons, oral reading from texts and answering workbook exercises were still the predominant activities. We rarely saw reference books, trade books, and audiovisual materials incorporated into content area lessons. Silent reading of content area texts was infrequent. Vocabulary instruction was often limited to coyping definitions from the dictionary; practice using new words in varied contexts - which we hypothesize is especially important for low-income children - was provided by very few teachers when we were present.

Although teachers in the second yearof the study reported doing a variety of writing activities in their classes, for 25% of target children several times a week, we saw very little composing of more than words or phrases. Instead, we saw much "quasi-writing" - copying and filling in the blanks in workbooks.

There was considerable variation in the number of library visits for target children during school hours, related to the availability of specialists, the location of public library branches and the initiative of individual teachers.

Based on our observations and on interviews with teachers, we make the following predictions:

1) Because of inequalities in time spent on reading lessons and emphases in instruction for good and poor readers, and because of the absence of a consistently rich literacy environment across classrooms, the original gap between above- and below-average reachers in our study will generally be increased.

2) The absence of explicit instruction in comprehension strategies, the low incidence of inference questions, and the lack of thorough vocabulary instruction will be related to depressed reading achievement among the older group of target children for whom these skill areas are particularly relevant.

3) There will be considerable variation in the gains made by individual target children across the years of the study, and patterns of gains in reading will be related to specific differences in classroom literacy environments.

Classroom factors, including observer ratings of instruction and variety of materials used, will be related to patterns of achievement in word recognition, comprehension, and knowledge of word meaning below, in chapter 8.

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Chapter 5:

Perspectives on Home and School: Viewpoints of Parents, Children and Teachers

Introduction

We have seen in the previous two chapters how the children's home and their school experiences vary, and what dimensions in their home and their school environments are relevant to differences in their school achievement. Chapters 8 and 9 will explore in greater detail the home and the school factors that contribute to the successful acquisition of literacy. In this chapter, we will address the ways in which the home and the school influence one another - the overlaps between the home and the school environment. A first section presents case studies of seven families, to illustrate varied types of relationships between home and school, and the consequences of these for seven focal children. The second section of the chapter gives the parents' views on their children's schools and how much they know about their children's grades and progress, as well as the children's own views about their schools and their teachers, past and present. Teachers' views of how the children's family lives has helped or hurt their school achievement and teachers' characterizations of the children in school are also included.

Direct contact between home and school influence these views, both teachers' conceptions of the child and family and the parents' views on the child's experiences at school. The third section of this chapter presents data on how often teachers contact parents and how often parents contact teachers, the nature of the contacts, and the relationship of the contacts to children's achievement.

Another form of communication between school and home is homework, in McDermott's trenchant description, "School brought home." The next section presents information collected from teachers and from parents and children about homework, its purpose, its value, how it gets done, and how it relates to children's school achievement. A final section relates parents' and teachers' educational expectations for the children; similarities and contrasts between these for children of different ages, sexes and races are presented.

The Gallagher Family

Beth is a cute, bubbly, blonde thirteen-year-old, one of five children who lives with her parents in a small, single-family house in a working-class neighborhood, just off a busy street. Beth's father, who has been a postal worker in the city where they live for over 20 years, looks older than his years. Mrs. Gallagher, an extremely friendly, warm person, has worked the night shift on her job as a pediatric nurse for seven years, so that she or her husband can be home with the kids. She is very happy with her job and talks openly about the satisfaction of taking care of sick children who need her help and support.

Beth is the middle child in the family. She has an older brother, Michael, 16, and an older sister, Margaret, who is 14, and two younger brothers, Patrick, 11, and Timothy, 12. Mrs. Gallagher believes that the five children were spaced too close together, and that this has been the source of quite a bit of sibling rivalry among the children. Mrs. Gallagher thinks that Beth in particular has had to "fight for her own place in the family," that she was "pushed aside" when her younger brother, Timothy, was brought home from the hospital. When Beth was three or four years old, Mrs. Gallagher took her to the local mental health clinic because she was concerned about her nail biting, competitiveness, and the general sibling rivalry in the family. Mrs. Gallagher describes Beth now as temperamental, sensitive and competitive - "she doesn't like to lose." Her brothers and sisters tease her a lot and this still causes some problems and tensions for Beth, although it no longer provokes Mrs. Gallagher to "blow her stack." With adults, Beth is self-composed, comfortable, and shows her good sense of humor.

Mrs. Gallagher told us that Beth is really tied to her, that she will come and talk to her when she is doing needlepoint or is involved in some other craft project (perhaps it is not surprising to note here that Mrs. Gallagher was also a "middle child" in her family of origin). Beth shares her mother's interest in doing arts and crafts of all kinds. Although Beth reads less than any other child in the family, she does like reading craft books.

The Gallagher's home is sparsely furnished, yet neat. Throughout the downstairs rooms there are numerous small plaques with Irish sayings, such as "May you be in heaven half an hour before the devil knows you're dead." Because seven people live in a modest-sized house, neatness is important. Mrs. Gallagher's crafts materials are stored in the dining room. The children's possessions are put away in their rooms and their books are kept in the cellar. Recently a new floor was put down in the attic and the children go up there to play games. Mrs. Gallagher says she expects the children to be able to "occupy their time quietly" because the house is so small.

Mrs. Gallagher was very receptive to our project. When we went to her house for the final interview with the family, she welcomed us graciously as usual and explained that she had wanted very much to fix us lunch. She skillfully orchestrated the comings and goings of the children to ensure us privacy with each one for our interviews. During our visits, the children were cheerfully compliant regarding her requests to make another cup of tea, check to see if their dad, who had been working the second shift, was awake, take a form upstairs to complete, and so forth. Mr. Gallagher was happy to participate in the proejct as well.

Religion is important in this family. The children were all given the names of saints. Both Mr. and Mrs. Gallagher, as well as the children, attend church weekly, and the oldest son attends Catholic high school. Mrs. Gallagher belongs to the Women's Sodality, although she is not as active as she would like to be, and Beth attends CCD meetings during the week. Mrs. Gallagher says she prays a lot over the problems of friends and relatives which cause her some stress. She believes that in Sunday School the children are learning compassion and how to get along better.

Mrs. Gallagher told us that it is harder to pay bills now than it was when the children were younger. The family is not able to afford everything it would like. For example, last year Beth took guitar and gymnastics lessons, but stopped these recently because "it just got to be too much money." Mrs. Gallagher says that she concentrates on buying books and toys for the children that bring out each one of their interests - "each thing I buy has a reason." For example, she recently bought Beth Little Women, which became Beth's favorite book. Mrs. Gallagher would like all her children to go through college -"This is an Irishman's dream." Only awful financial problems would prevent them from doing so.

The Gallaghers expect their children to show good behavior in school, to get along with their classmates, and to have good marks in effort. Mrs. Gallagher told us, "I look at the effort mark. If the effort is good, that's what I care about." Beth's teacher has told her, "It is a pleasure to have Beth in class."

Mrs. Gallagher is proud of the fact that four of her children were on the honor roll this past year. She explained that she had not visited any of their teachers this year because they were all doing well. Michael, the oldest son, doesn't enjoy school as much as the other children do. He plans to go into the Air Force or join the Highway Patrol when he finishes high school.

Both Mr. and Mrs. Gallagher enjoy reading. Mr. Gallagher regularly reads the local newspapers, Newsweek magazine, and sports magazines. Occasionally, he reads a mystery. When we were at their house, one of the children was sent out by Mrs. Gallagher to get their father's evening paper at the corner store. Mrs. Gallagher is an avid reader. She reads all the magazines subscribed to for the hospital waiting room - People, Family Circle, Ladies' Home Journal. She also enjoys reading adventure stories about people. Mrs. Gallagher talked in greater detail about her reading interests than any of the mothers we interviewed. She gave us a long list of favorite books and authors.

Beth's favorite thing to do after school is to watch the soap opera "General Hospital," with her sister Margaret. Timothy commented that the only time his sisters missed "General Hospital" in the past year and a half was during Reagan's speech. Michael admitted that he was also "hooked on it." Beth occasionally makes friendly bets with her father concerning the timing of "General Hospital" episodes, and there is a good deal of joking and conversation in the family surrounding the viewing of this show. Beth says that she wants to be a cruise ship director or detective when she grows up - career choices that have been influenced by other television programs that she enjoys - "Love Boat" and "Nancy Drew." There is considerable squabbling over TV, but the kids know that Mrs. Gallagher will just come in and turn it off if fighting gets out of hand. Mrs. Gallagher admits that she is the more authoritarian of the parents and that Mr. Gallagher has always been more calm and patient with the children.

The Gallagher's high level of interest in reading and concern that their children show effort and good behavior in school has probably made it easier for the children to do well. Their love and sense of commitment to their children shines through in their conversation and directs the allocation of the family's scarce resources. Nonetheless, one of Beth's seventh-grade teachers thought the Gallaghers were fairly indifferent to Beth's schooling and were hard to establish contact with, particularly because they hadn't come to any parent-teacher nights. Mrs. Gallagher, however, specifically said that she "had not gone up to meet the teachers this past year because the children were all on the Honor Roll." The Gallaghers felt that all was going well with Beth and they didn't need to intervene with her teachers. It wouldn't have been easy for the parents to attend evening PTA sessions because both the mother and father work at night. However, the year before when Beth was doing somewhat less well, Mrs. Gallagher had gone to the class meetings and the teacher singled out "support from home" as a factor in Beth's improved school work that year.

The Conlan Family

James Conlan is an appealing eleven-year-old - slender, freckled, stawberry blond, polite and pleasant. He and his equally attractive older sister, Michelle, 13, live in a rather cramped two-bedroom apartment with their parents. Michelle has her own bedroom, but James sleeps on a small bed in the entryway. Their duplex is located on the outskirts of Norwich Corner, close to industrial terrain, but in the neighborhood where many of Mrs. Conlan's relatives live. Mrs. Conlan's mother lives next door and her presence there means that child care has never really been a problem. The Conlans lived for a time in a nearby town, but disliked it because there were no parks and not enough activities for the children.

Mrs. Conlan works as an insurance claims adjuster for the state, in a position which, she points out, actually requires a bachelor's degree but to which she worked her way up. She could not attend college to become a pharmacist, as had been her plan, because of illness in her family and her subsequent need to go to work. She loved school and still reads a lot for pleasure. She was one of the few women in the study who spontaneously talked about the book she was reading, who recommended books by name, and who said she preferred reading to TV. When she does watch TV, she watches movies, rather than police dramas, soap operas or sitcoms.

Mr. Conlan, on the other hand, spends his leisure time watching TV or playing with their recently-purchased ATARI in the evenings, after coming home from his job at the telephone company. He is clearly a warm, loving, involved father, and participates in the very active life the members of this family share.

The Conlan household was one in which books existed but were hidden from view. When Mrs. Conlan sent Jimmy to bring out the book she'd just bought him, he extracted it from a kitchen drawer. There was no space for bookshelves in the tiny living room, though Michelle had some shelves in her bedroom. Mrs. Conlan had given away the book she had just finished to a friend at work. Mrs. Conlan mentioned that she still sometimes reads aloud to the children, especially short stories.

Mrs. Conlan presented herself - not at all arrogantly but with self-confidence - as a sort of expert on producing children who read well. Without our asking, she offered us additional help with our study - "If you want kids for a study, we have them here" - and said after our first visit, "I hope you find out why some kids like to read. Mine do because I read a lot and I always read to them a lot!"

Mrs. Conlan is very proud of her children. She showed us a poem Jimmy had written, a Mother's Day card he'd made, and a clipping of a story by Michelle that had been published, and she also mentioned their many accomplishments, including Michelle's flute playing.

The children generally do some of their homework unsupervised before their parents get home, but Mrs. Conlan occasionally helps fill in the pages in Jim's worksheets if she thinks he's too tired, or if "it's more work than should be expected of him." Both Mr. and Mrs. Conlan complain that their kids get too much homework, because it interferes with their family plans - bowling and going out to eat one night a week, visiting with family and friends, Jimmy's catechism lessons and Little League, and special excusions like going to see the Tall Ships and viewing an aircraft carrier. The family also spends summer weekends at the beach and shares jointly-planned vacations.

A very pleasant sense of mutual enjoyment and child-centeredness characterize this family. This is reflected in Jimmy's and Michelle's activities and comments about each other. They spend a lot of time together and seem especially close and harmonious for siblings two years apart in age. This is one of the few families where the children are not described as constantly squabbling. This lack of sibling rivalry is the more remarkable in that Michelle is in many ways portrayed as the "favored" child in the family. She is a straight-A student, whereas Jimmy has had his problems in school. Michelle's academic superiority is an open fact in the family; Jimmy walked in while we were asking his mother about differences between the children and answered before she could, "Michelle is smarter."

Although Jimmy was reading a year above grade level at the time, his third-grade teacher gave him failing grades in math and near-failing grades in reading and referred him for special education services. At the end of the fourth grade, Jimmy was reading about two years above grade level but has shown no improvement on reading tests during fifth grade.

In any discussion of Jimmy's school problems, Mrs. Conlan is clearly on the child's side, much more willing to assume that poor teaching or inappropriate assessment techniques - rather than the child's incompetence - are the cause. As a result, she does not bother much with contacting the school or going to meetings. Since Jimmy's third, fourth and fifth grade teachers did not contact the family either, their views of the Conlans were impressionistic. Jimmy's fourth-grade teacher characterized the family as "very encouraging and supportive," saying that Jimmy worked very hard and was able to stay on task and complete assignments. On the other hand, his fifth-grade teacher thought the parents let Jimmy miss school unnecessarily.

The Conlans feel relatively little sense of power to improve or influence the school. For instance, Mrs. Conlan said it was "a waste of time" to go to meetings on redistricting, since the school board would decide any way, and that PTA meetings are just "frosting," that no substantive problems ever emerged there.

The Conlans are quite willing to take the responsibility themselves for their children's growth and education. It is fortunate that the children read well and do generally good work in school, or else it would be hard for the Conlans to deal effectively with the schools.

The Williams Family

Jessica is an extremely sociable, outgoing, self-confident fifth grader who lives alone with her mother Paula in a nicely furnished apartment, decorated with large fans and violins hung on the wall. Paula works as an office manager, and enjoys her job because it is challenging and "keeps me busy!" Paula is working slowly on a college degree, taking one or two courses a year at various adult, open enrollment institutions. Paula's courses have made a real impression on Jessica, who thinks her mother "the smartest person I know" because of them.

Paula and Jessica's life together seems in some ways more like one shared by two single, working girls than by a mother-daughter pair. Each has her own life, and they get together to talk, socialize, watch TV, go out to movies or a restaurant, and have fun. Jessica goes off each morning to school, comes home alone, talks to Paula on the phone, then fixes herself something to eat, perhaps does some homework, does a load of laundry, watches TV, goes to a nearby after-school activity center or plays dodgeball or jumprope in the apartment parking lot with friends from the neighborhood. If Paula is not home by 6:30 she calls to make sure that Jessica is all right. When Paula gets home she checks Jessica's homework, fixes herself something to eat, then reads or watches TV, sees her boyfriend, or does some chores.

On weekends Paula and Jessica always go out and do something fun together -- a movie, dinner at a restaurant, perhaps roller-skating or bicycling if the weather is nice. They usually watch their favorite TV shows together too -- "Fantasy Island," "Love Boat." Paula clearly enjoys Jessica. She objected to Jessica's leaving for several weeks to go to summer camp because "I'd be too lonely" and said, "No matter how bad a day I've had, I know when I come home at night that Jessica can make me laugh!" Paula appreciates Jessica's special qualities and says proudly that Jessica would be very good as a nurse or working with older people -- a somewhat surprising statement from a woman who seems oriented in her own life towards glamor and financial success.

Jessica does not have an easy time in school. Her eyes filled with tears when she was answering some of our questions about school. She said she worked pretty hard at school -- "I'm always trying to play catch-up. Because I have so many teachers I'm always doing something else!" (Jessica has put her finger on one of the problems with 'pull-out' programs for special needs tutoring.) Her mother intervened when Jessica was younger by talking to her teachers and by arranging for extra homework. In the past two years, Jessica's teachers haven't contacted Paula at all and she in turn hasn't gotten in touch with them. There is a rule that Jessica must do her homework at the dining room table (i.e., not in front of the TV) before Paula gets home, but the rule is clearly violated quite often. Paula says she checks Jessica's homework when she gets home and helps with any hard points.

Of all her school subjects, Jessica has the most difficulty with reading,according to her mother. Although Paula worries about her daughter's reading problems, she has not let them transform Jessica herself into a problem. Paula sees Jessica as bright, lively, fun to be with, independent, and competent. She feels Jessica was somewhat spoiled during her early school experiences -- when she "got too much attention" -- and has not learned to concentrate or apply herself sufficiently. But there is no suggestion that Paula thinks Jessica is intrinsically incompetent or stupid.

Paula, despite her worries about Jessica's reading, treats her more like a roommate than a daughter in terms of helping her with reading. She thinks that what Jessica needs to do is practice reading, and admits that Jessica hates to read to herself but loves to read aloud. But Paula hates to be read aloud to, so won't let Jessica use her as an audience. Paula does offer to buy Jessica books, and has urged her to read Nancy Drew stories (her own childhood favorite), but Jessica remains pretty uninterested. She was reading Charlotte's Web when we visited, but was vague as to the plot -- perhaps because Charlotte's Web is considerably too hard for Jessica's second grade level reading skills.

Paula and Jessica are also rather like roommates in that Paula tries to avoid real conflict instead of resolving it through exercises of parental authority. Conflicts about what to watch on TV were solved by an arrangement where each now has her own TV in her own bedroom. Conflicts about Jessica's use of Paula's cosmetics and about spending money were solved by raising Jessica's allowance to $5.00 per week, but asking her to buy her own cosmetics and other personal supplies from that sum. Each has her own room as a retreat, with the living/dining area of the spacious apartment treated much more like 'public' space. That public space includes a bookshelf containing Paula's college course books and reference books and a banner proclaiming, "When God comes back she sure will be pissed."

Photos of Jessica are also much in evidence, framed and hung on the wall. Jessica's room was full of toys, including foreign dolls, an elaborate fish tank, and her bicycle. A pile of Seventeen magazines was stacked under her bedside table. One gets the sense that Jessica is not so much indulged as that her mother assumes Jessica has a right to half the family's resources -- share and share alike.

Paula and Jessica talk together much as equals -- they tease and argue, bicker and offer mutual help, much like sisters or roommates. There are some rules in the household -- for example, that Jessica should keep her room clean -- but that too is the source of bickering and teasing, not an arena in which Paula exercises her maternal prerogative. They share an interest in nice clothes, new hair-dos, and make-up. Jessica reveals her equal status when she interacts with other adults as well; she is not the least bit shy or intimidated by strange adults. She carries the burden of conversation with strangers, often asking questions and making suggestions, with a manner that is forthright and a bit audacious but neither rude nor offensive.

Paula's parents are Portuguese, and she herself understands some Portuguese, but does not speak it much. Her mother lives within a short bus ride, and Jessica often goes there to visit. Paula's father (divorced from her mother and remarried) and she were quite close, and they had shared a two-family house until it was damaged by fire when Jessica was in second grade. Paula and Jessica often went to visit him at his summer house for weekends, until he died during the fall of Jessica's fifth-grade year. Paula's child care arrangements were very complex until Jessica got to be old enough to get home from school on her own. Paula's mother helped out, and her father's second wife did so too. Paula's husband also helped during her brief second marriage (she and Jessica's father were divorced very early and have no contact now).

In fifth grade Jessica was put in a class with a teacher who was quite strict, demanding, and often fairly stern, who gave lots of homework, and demanded oral recitation in the classroom from children whether they knew the work or not. Jessica and Paula were both very appreciative of this teacher, feeling that she demanded a lot but also taught a lot; this was Jessica's best, most enjoyable, and productive year in school so far.

Jessica leads a pleasant life in many ways -- only school is a major source of difficulty for her. Her life is so much fun partly because she gets to play the role of sister to her mother -- but it is precisely that relationship that might be blocking a solution to her school problem. When doing homework or trying to read, Jessica really needs a mother who will set standards and enforce discipline in a nurturant atmosphere, not an older sister preoccupied with her own activities.

The Pagliucca Family

The Pagliucca's live in Righetti Field Projects. The living room is modestly furnished in dark green colors that match the numerous full green plants hanging from the ceiling. Ms. Debby Pagliucca doesn't like living in Righetti Fields, feeling that it isn't a good place to raise kids "but this is where they stick me." She preferred living in a neighborhood across town and tried to get into the housing projects down there when her apartment became too small so the children wouldn't have to be transferred to a different school. Her current apartment was the only subsidized housing offered to her.

Derek Pagliucca, 8, has one older half-brother, Paul, who is 10, and a younger sister, Gina, 4. The two boys share a bedroom, the daughter has her own bedroom, and Debby, their mother, has her own bedroom. A former boyfriend lived with her for a while but left a year ago and now her current boyfriend, James, who is a trucker, lives with the family when he's in town. He was there during all our home visits and talked with us articulately and at some length about various political issues when we waited for Debby to return home for one of our interviews. The sons talk about James as being part of the family, they look up to him for help and support, and he visits Debby's family with her and the children. Derek's third grade teacher felt that James had made a real contribution to Derek's language skills in particular, and singled out interaction with James as a factor in his improved school achievement. However, Debby doesn't consider James a part of the family, as evidenced by her omission of him in the family interaction scale and her responses to several questions about "members of the household." Derek still sees his biological father and was a ringbearer in the wedding when his father remarried recently.

Debby's income comes from public assistance. Recently, she had a ten-hour-a-week job as a school crossing guard; however, she quit after two months because even though "the job was easy," she didn't really want to work. In the past, she has worked sporadically as a waitress and as a clerk for a few weeks at a time. She completed tenth grade only, didn't particularly like school, and said she wouldn't want to get any more education. She doesn't like to read at all; she picks up the Sunday paper and the local town paper occasionally. Other than that, she reads magazines when at the dentist's office. At home, she spends most of her time "sittin' around with James," watching TV, taking care of the kids, and cooking.

She takes the children to visit her parents and sister in a nearby city several times a month. On school days, the children play with friends in the project and watch TV every evening before and after supper. On weekends, Derek and his siblings do pretty much the same things, watching TV and playing with friends. When the weather is good, they play outdoors a lot. Derek doesn't have a best friend, but seems to get along with his peers. Debby doesn't feel he's a very independent kid nor one who shows much leadership with other children his age. But she feels Derek is very active and tries hard, especially at sports. He especially likes rollerskating; according to Debby, he does that better than anything else.

Debby's attitude about the school seems to be one of laissez-faire. School is important "to teach children how to make it in this world, give them the knowledge they need to know." "Teachers should take all the initiative.... I tell them they can call me on the phone; it's hard to get down there," even though the school is a few blocks from the project. Derek's second grade teacher said he dawdled and daydreamed in class a lot; she sent notes home to Ms. Pagliucca three or four times, complaining about unfinished classwork. Debby asked Derek's third-grade teacher to send notes home with Derek regularly, reporting on his progress. The third grade teacher felt Derek was a bright child but didn't feel he'd experienced much encouragement to excel from his mother. Debby doesn't know what Derek likes most or least about school, only that he likes to go. She says he doesn't like to read or write very much at all, although he goes to the bookmobile every week "to look around." Debby helps the older children with homework about once a week. When Derek asks her about a word (what it means or how to spell it) she usually tells him "because it's easier that having him look it up."

Debby feels that Derek is doing well because "he's getting 'goods' and 'satisfactories' on his report card." Derek had trouble in the first grade at the school in their old neighborhood because "he didn't like the teacher and the teacher didn't like him." This teacher didn't live up to Debby's idea of a good teacher, "one who takes her time with each kid. Don't just throw the paper on the desk and say 'do it'. Explain stuff so the child can do it right." Except for this one teacher, Debby liked the Outer Norwich school much better than Derek's present one. Debby would like all her children to go through college, but expects them to get through high school only. She thinks Derek's "gonna be something, since he's smart so he'll make it." Derek has been fortunate to have teachers who were concerned about his progress, who recognized his abilities and who contacted his mother to enlist her help.

The DaSilva Family

The Righetti Field Projects are not a pleasant environment, but the three-bedroom apartment occuped by Hope DaSilva and her two children, Karyn and Steven, is attractively decorated and welcoming. Karyn, a second grader, is a sweet-natured child, a bit plump and much darker-skinned than either her mother or her twelve-year-old brother. Hope and Steven share a slender, lithe attractiveness and a sense of goal-directedness that Karyn lacks. Hope and Karyn, on the other hand, share an interest and enjoyment of social activities, and an ability to "have a good time at a Spanish wedding or a Creole baptism," as Hope puts it.

Their access to these kinds of social activities derives from Hope's self-described role as "your local Avon lady and heart-fund volunteer." She knows lots of the neighbors in the building, and has been active in efforts to improve maintenance and security in the projects.

Hope has a problem-solver's approach to life - analyze what's wrong, then do your best to correct it. She's had a lot of problems herself - raising two children alone, while trying to complete her own education and hold down a full-time job at the same time. Although never married, her solution for several years was to enlist the children's father's help with child care during her night-shift working hours.

Hope has always had to balance Karyn's and Steven's needs for her attention at the moment against her own aspirations and her plans for achieving a better life for the family in the future. As a teenager, soon after Steven was born, Hope decided she'd like to become a nurse, and got her high-school diploma through a program she describes very positively. "They really made me a student. I discovered I could learn!" She took several courses towards a nursing degree, but decided that she needed a job that would not require shiftwork (though she loves working with patients, especially with elderly and very ill patients) so she switched to a medical transcriber's course.

Both Karyn and Steven had problems with tardiness at school, especially when their mother was working third shift as a nurse's aide. Karyn's second-grade teacher in particular became concerned. "Her motivational level was extremely low, she came in tardy often, appeared distracted and tired and was reading only on a primer level." The teacher telephoned or sent notes to Hope at least ten times during this year. Several times Hope was unable to keep appointments she'd made to discuss Karyn's problems because of a combined schedule of evening courses and late night job. The teacher reports that, "Towards mid year it turned itself around. There was parental concern and involvement and then improvement." Worried about Karyn's school difficulties and with less and less help from the children's father with child care, Hope dropped out of her courses and then quit her night-time nursing job. She went on welfare and looked for part-time work she could do at home to supplement it, eventually becoming an unlicensed day-care provider.

Karyn's reading scores have improved steadily over the past year and a half, since the second grade teacher began alerting Hope to her difficulties and since Hope started helping with remedial work at home. Karyn's third-grade teacher also saw progress across the year, characterizing Hope's contribution as "very helpful." Hope looks for occasions to demonstrate the practical uses of literacy as well - she had both kids write a letter in support of Title I when funding was threatened and Steven and Karyn won t-shirts for their entries in a promotional contest on energy conservation.

Problems in Hope's life are met with creative solutions. TV never had been a source of conflict until she quit work and had to hear the kids squabbling all the time. So she set up a system whereby Karyn and Steven each got to choose programs half the time - Steven on Monday and Thursday and Karyn on Tuesday and Friday. Hope chooses on Wednesday ("but I pick the programs they want") and on weekends they are usually with their father. After the kids are in bed, Hope watches the public television station - the only parent in the study who reported doing so.

Chores around the house are also apportioned equally among all three family members. There is a job chart in the kitchen, on which each fills in his or her own name (Karyn's named spelled Karny consistently). Each is expected to share in all jobs from dishes to vacuuming, shopping, laundry.

Another problem Hope faces head on is that of discrimination. She complained at school that Steven was not selected for an advanced math class because he is black, and she switched Karyn from one dance school because of suspected discrimination. Hope's own schooling was erratic and she describes herself as never having understood what school was all about as a child. She wants more for her children; Hope plans to transfer Karyn to a parochial school as soon as she can find the money, because the best reader among Karyn's group of friends goes there.

With more economic or societal resources at her disposal, Hope's problem-solving approach to life would be more effective. She is often overwhelmed by her lack of money, the difficulty of finding cheap, reliable child care so she can work, and the impossibility of pursuing her ambitions for herself without taking time and attention from the children. Her own youth and the unreliability of the men she has been involved with make it hard for her to follow through on many of her plans. Nonetheless, Karyn and Steven could hardly have a better role model in setting high goals and working to achieve them.

The McDonough Family

Daniel is a polite, rather self-assured and talkative child, the youngest of three boys in the McDonough family. The two older boys are twins, aged fifteen. Daniel loves to ride his bike, play chase or guns or whiffle ball with his brothers and friends in the neighborhood. He is also active in Little League - something his older brothers never got involved in. Danny has been called a "daredevil," a child who will try anything.

The twins, Mike and Greg, share a room, work in the same discount drug store as stock boys, and go to the same school. Mike loves to draw and paint and wants to be an artist or cartoonist when he grows up. He has had a long history of difficulties in school because of shyness and a speech problem. Greg is seen as the academic star of the family. He recently attended a National Science Foundation summer program at a local university, a fact that both his parents were proud of. Mrs. McDonough hopes that he will go to Harvard. Daniel turns to his brother, Greg, whom he idolizes, as a role model and someone to talk with. Mrs. McDonough sees Greg and Daniel as alike and describes both of them as "outgoing." Greg says that Daniel tries to be like him. "He sees me smoking and pretends he is; that worries me."

Mr. McDonough had been quite interested in our research project and spent two afternoons in June of 1981 being interviewed. He spoke at length about his life, his three sons, and their education. Mr. McDonough had been the evening manager at a large supermarket until last year when he had a disabling stroke. Mrs. McDonough works as an administrative assistant. She likes her job and says she had a supportive boss who told her, "Your kids come first. Go to the school or doctor if you have to." Before his disability Mr. McDonough had chosen to work evenings and be home during to day in order to spend time with his sons. While Mrs. McDonough was still responsible for cooking and cleaning, Mr. McDonough used to have varied child care responsibilities; buying clothes for the boys, for example, and participating in some of their classroom activities.

Daniel had problems adjusting to first grade which resulted in his mother being called to take him home "sick" several times in the middle of the day. (Mrs. McDonough worked in the school lunch program this year.) Mr. McDonough told us that the first grade teacher warned them that Danny might have problems learning to read. The McDonoughs were on the alert for signs of difficulty with Daniel because of the school problems of his older brother, Mike. Midway through Danny's first grade year the school arranged a core evaluation for possible learning disabilities. He was tutored by a special education teacher for the next year.

When Daniel was in second grade his parents initiated contacts with the teacher to monitor his progress in reading, and Mr. McDonough started working in Daniel's classroom as a school volunteer. The teacher noted that Mr. McDonough was "a great help during special projects.

Daniel's reading had improved dramatically by the end of second grade. In Daniel's third-grade year, the family continued to have extensive contact with the school. Mr. and Mrs. McDonough telephoned Daniel's third-grade teacher because they felt he was "nervous and afraid to do his work." The teacher describes the McDonoughs as very concerned and supportive and says "they also reassure Daniel when needed." Although Daniel's reading skills by this time were superior, based on standardized test results, he was assigned to the middle of three reading groups. Daniel's mother worried about this, still feeling that he was not making all the progress he could.

Daniel matured considerably during the period of our study. During his second-grade year, he was extremely fidgeting during our observations at school and at home. Classroom observers described him during one less as "squirming, stretching, tapping his fingers, making faces, but never bothering other children in the classroom." He typically worked in "short snatches." At home we also observed his short attention span during the diary task, which Daniel did with his father. Daniel was eager to finish as soon as possible. Fifteen minutes into the task he went to see what time it was and slipped out to watch TV as soon as he could. His father was very calm and patient with him. At one point Daniel leaned on the table too hard and almost knocked over a lamp. His father said calmly, "Please, Daniel." The fidgetiness that was so marked in second grade was not evident during much of our classroom observations when he was in third grade.

Daniel told us that his favorite subjects in school are math ("because it's easy") and spelling. He said that when he was little his mother and father read fairy tales to him every night, and his favorite books are Cinderella and The Princess and the Pea. He said he likes to look at the sports and comics sections of the paper; his brother Greg occasionally buys him comic books, but the twins like to read more than he does, according to Daniel.

Television is an important part of Daniel's life; he watches about five hours a day, the most of any of the McDonoughs. He'll turn on the set in the morning to watch before he leaves for school, as well as when he gets home. He has many favorite shows, among them "MASH," "Good Times," and "The Brady Bunch." Mrs. McDonough encourages Daniel to look at TV Guide every day to see in advance what will be on, which he usually does, but he prefers just watching the same program.

The McDonough family has two televisions - a large color set kept in the living room and a small black-and-white model, called the "kids' TV," kept on the third floor. Everyone in the family prefers to watch the color set. Daniel said that when different people want to watch different programs at the same time "one of us has to go up and watch on the little black-and-white set - mostly me, because I have two big brothers and there's only one of me."

The McDonoughs have a rich, extended family life - which has been a real support in the months since Mr. McDonough's stroke. The family lives in the house where Mrs. McDonough grew up, and her sister lives just around the corner. Most of Mr. and Mrs. McDonough's siblings live close by. Their social life centers on family functions, especially church-related events - baptisms, first communions, weddings. Daniel is particularly close to his Aunt Lucy, who lives around the corner, and an older cousin who lived with the family for a couple of years after his divorce.

The McDonoughs value school success very highly; both of them hope that Greg will go to Harvard and their mobilization of support when Danny first had problems are evidence of this. Danny's immaturity in first and second grade, his slow start in reading, were sources of real concern for his parents and also for Danny himself. Mr. McDonough's volunteer work in Daniel's classroom and the McDonough's regular checks with his teachers conveyed clear messages of support to Danny and to the school.

The Cruz Family

It would be hard to find a mother who made more sacrifices for her children's education than Isobel Cruz. The family has been split up for three years, since, for health reasons, Mr. Cruz had to return to South America where he is a subsistence farmer in a remote area. Although she misses her husband very much, Mrs. Cruz has stayed in the United States on account of the children. She wants Linda, 12, to get the best health care possible for her back problem and both Linda and her brother, Evaristo, 10, to have every educational opportunity, both in and out of school.

Outside of school Linda and Evaristo take advantage, with encouragement from their mother, of swimming, arts and crafts, and other activities of the YMGA, taking out books, going to films and other programs at the public library, and free sailing and piano lessons.

In order to make it possible for the children to stay in Norwich, Mrs. Cruz cleans other people's houses or takes care of old people whenever she can. She cannot take steady work because of Linda's health problems so she gets medicaid and some welfare. She has the lowest income of any family in the study - $5,000 to $6,000 a year. Their two-room apartment has only the barest essentials - a table and four chairs and cooking utensils in one room, three matresses on the floor, a chest of drawers, and a few toys and books in the other. This was the only family in our study who didn't have a working television; theirs had broken long ago and they couldn't afford to get it fixed.

Mr. Cruz sends money to support his family, but they miss the emotional support they were used to getting from him and from extended family and friends in South America. The children miss their father very much; Mrs. Cruz describes Linda as "crying a lot." Yet the children were not happy when they went back to Peru for a year when Linda was in fourth grade. There was no school for them to go to at their level in this village, and no stimulation from outside their circle of family and friends. Mrs. Cruz is proud that her children are bilingual and wants them to be exposed to two wyas of life so that they can choose for themselves later when they are grown. Now that they are well enough established in both English and formal education to have an alternative, she feels, she plans to take them back to Peru as soon as she has the money. She'd like her children to learn to farm there with their family and to be part of the traditional culture. Besides, she can't bear being separated from her husband any longer.

Mrs. Cruz is active in the children's school, though not always approving of it. As a member of the parent advisory committee, she canvassed many of the parents in her neighborhood to find out their views on desegregation. In response to the question, "Is it true that anyone who can do the work can go to college?" Mrs. Cruz answered, "No, because of racism. A person has to be very strong to make it." She herself is very much in favor of her children's school being paired with a nearby white, middle-class one with a reputation for "open classrooms." Mrs. Cruz said that Linda had been in a class which was called open, but it wasn't "a real one." Isobel regretted that she had left her daughter with the same teacher for two years. Now Isobel is looking for a really stimulating open classroom for Linda. She feels it important that a teacher teach "the whole child" and is concerned that her son is "losing his love of learning." Also, the middle-class school is noted for parent participation, according to Mrs. Cruz, so with desegregation she looks forward to more of that. Linda and Evaristo's current school only talks to parents when the child is tardy, she says.

Isobel herself loved school as a child and did very well in South America as far as she went - stopping before high school to go to work. When Linda was young, Mrs. Cruz read to her almost every day; now she does about once a week or whenever Linda wants her to. Mrs. Cruz doesn't help the children with their homework because she says they don't need it. Both Linda and Evaristo are doing fine in school, according to their mother, and although Evaristo is two years younger than his sister, he reads the same books. He also accompanies his sister on the bus to her piano lessons in the later afternoon. Linda herself reported reading a lot and was the only child in our study to name as many as four favorite authors - Charles Dickens, Jack London, Carolyn Keene, and Mark Twain. She was also our only focal child who mentioned going to museums on weekends.

In our observations in Linda's classroom, Linda was a quiet, conscientious student who seemed on the periphery of most class activities. During a reading lesson that was loaded with interruptions and distractions, she worked consistently through the chaos, stopping to stare into space when the noise level got especially high. During whole group lessons in math and history, Linda didn't volunteer any answers but attended to the teacher and followed along in her book. During free time she read a novel at her desk rather than joining in other children's conversations. Both our observations and our testing of Linda made us feel she was a competent child with solid skills; however, the classroom teacher thought of her as having special needs and arranged for her to spend time each day outside of class being tutored by a learning-disabilities tutor. Thinking she was weaker in reading than most of her classmates, Linda's teacher assigned her to the lower of two reading groups. He did say that she enjoyed silent reading and always got her work done; she brought in her homework on time without getting help on it at home, he thought. Although Linda's mother was a volunteer in school activities, the teacher didn't contact her during the year. Mrs. Cruz did contact him to check on Linda's progress, he said. He called Mrs. Cruz "very involved" and felt that her involvement contributed to Linda's level of success in school.

Summary of Case Studies

The case studies illustrate various types of relationships between home and school and the consequences of these for children's school success. The Gallaghers, Conlons, Paula Williams and Debby Pagliucca initiated few contacts with the schools during the period of our study, and none of these parents were consistently seen by their children's teachers as helpful or facilitating. Reasons for a low level of involvement varied. The Gallaghers saw no need to get involved because their children were already doing well. Mrs. Conlon had a cynical view of the school - she didn't feel it would make any difference to her children's reading success if she got involved. It is fortunate that the children in both these families are strong readers. Jessica Williams and Derek Pagliucca, on the other hand, have had problems with reading in school. Neither of their families initiated contact with the school; as Debby Pagliucca said, "Teachers should take all the initiative." For children like Derek and Jessica, chances of getting support at home and the chances of their families being informed about school progress seems to be dependent on the teacher. During both years of the study, Derek's teachers telephoned and sent notes home to Debby concerning his academic problems; nobody at Jessica's school, however, communicated with Paula after Jessica was assigned to special education in third grade. While Derek's teacher sent home weekly reports on his progress, Paula Williams heard nothing from the school about Jessica's continuing problems. Although other factors were involved, it is interesting that at the end of the two years of our study, Derek was reading well above grade level and Jessica was still several years behind.

The other parents described in this chapter, Hope DaSilva, the McDonoughs, and Isobel Cruz, were all involved in the schools, though in differing ways. The McDonoughs and Isobel Cruz worked as classroom volunteers, and Mrs. Cruz was also active on the parents' council. Hope DaSilva contacted the principal and teachers about specific problems involving her children; for example, Steven's exclusion from a math class and Karyn's tardiness.

Hope DaSilva and Isobel Cruz, like Mrs. Conlan and Debby Pagliucca, expressed criticism of individual teachers and school practices and organizations. Hope's and Isobel's involvement seemed inspired by distrust of the school, a feeling that their children wouldn't get a good education unless they themselves initiated some changes. In contrast, the McDonoughs felt the schools were doing a good job and wanted to cooperate by participating in their child's education. The McDonoughs looked to the school to provide an assessment of their children's capabilities; for instance, they accepted the first-grade teacher's prediction that Daniel would have trouble learning to read. On the other hand, Ms. DaSilva, like the Conlons, resisted the school's attempt to classify her children as learning problems.

Karyn DaSilva and Daniel McDonough, both of whom were intially classified as below-average readers, as well as Linda Cruz, a good reader, made significant gains in reading during the period of our study. A parent's involvement gives a message to the teacher that this is a child who is valued, for whom someone has high aspirations. Especially for children who initially had problems learning to read, like Karyn DaSilva and Daniel McDonough, or whose families speak a language other than English at home, like Linda Cruz, parental contact can significantly modify the school's view of the child. Contacts can also give parents specific information about the child's school experience, about teachers' requirements and in some cases about specific help that the home can offer. Parents can use this information, as Hope DaSilva did, to make concrete changes in the child's out-of-school life that will improve his or her chances for academic success.

Qualities of Good Schools, Good Teachers and Good Students

As the seven case studies illustrate, there is a wide range of attitudes among families about teachers and school. All 31 families in the study were interviewed about schools and teachers in general, and then about their children's own experiences in the Norwich schools. Children were asked their opinions about a variety of school-related topics. Teachers were asked about children's abilities, class participation, and the influence of the home. The interviews and questionnaires for parents, teachers, and focal children were constructed to provide parallel information on the same topics from these different perspectives.

The parents' perspective. Parents were divided on what they felt should be the most important goal for schools. One-third of both mothers and fathers thought it should be basic skills, one-quarter of mothers and one-third of fathers felt it should be reading. A handful said that discipline, skills and discipline, or social contacts were most important. Mothers and fathers of above-average readers were more likely to think that discipline was most important, while parents of below-average readers tended to think reading should be the most important goal.

When mothers and fathers were asked what a good teacher was, far and away the most frequent response was "someone who is caring and conscientious, who gives extra time to her work." For mothers, the second-most frequent response was "one who treats children as individuals, who helps them out with problems." "A patient and understanding person," was also mentioned by several mothers. Other responses included, "someone who helps the children make the honor roll," and who has "a soft voice," who is "not grouchy."

Regarding their idea of a "good student," the most frequent responses by mothers had to do with effort and attendance; good grades were also mentioned frequently, as were good conduct and attentiveness. Learning new things, being smart and curious were not frequent responses for mothers. Effort and attendance were also the characteristics of a good student most frequently mentioned by fathers. Fathers were not overwhelmingly oriented toward behavioral characteristics, however. Their next most frequent responses were being smart or curious.

The parents' ratings of Norwich teachers and school facilities were generally quite positive. Parents were asked to compare their children's teachers and schools with others in the area. Two-thirds of both mothers and fathers felt that most teachers in their children's schools were about average when compared to teachers in most other public, parochial and private schools in the city area. Most of the remaining one-third thought that the teachers were better than average. Half of the fathers felt that teachers in the schools neglect some students. Mothers weren't as likely to feel this way; however, mothers of below-average readers tended to think teachers neglect some students.

Slightly over half of both mothers and fathers felt that the buildings and equipment in their children's schools are about as good as most other schools. The rest of the parents were divided between feeling that facilities were better than most and feeling that they were worse than most. The majority didn't think that classrooms are overcrowded. Mothers (particularly those of below-average readers) were more likely to feel that schools would be better if parents had more control over the schools, but fathers generally thought schools would be worse.

Virtually all fathers and two-thirds of the mothers felt that most teachers are genuinely interested in talking to parents about school. One mother, however, said, "They never really talk with you, they talk at you." Mothers of fourth graders were particularly likely to feel the that the teacher was interested. The majority of parents responding felt that their own child's teacher was doing a "pretty good" or "very good" job of teaching this past year. One response, for example, was "This year Tracy's teacher is terrific, she stays late." Only parents of children in the fourth or sixth grades felt that the child's teacher was doing a "not so good" or "not good at all" job of teaching. There was no difference in teacher ratings by mothers of above-average compared to ratings by below-average readers.

Better than half of both mothers and fathers felt that their child - compared to other children in the class - gets along with the teacher about average. The remainder felt that their child got along better than most children.

The children's perspective. The traits children mentioned in describing teachers they liked were some of the same ones used by mothers in their descriptions of a "good teacher." When asked "What do you like about your teacher this year?," nearly half of the children said that she is "nice," or "funny." At the sixth-grade level children began to talk about fairness, and teachers were liked or disliked because they "treated you fairly," or "weren't fair to other children." Older children also said the teachers they liked were understanding. Across grade levels, the most frequent response children gave when asked, "What don't you like about your teacher this year?," was that she "yells" or "gets mad fast." Nearly a third of the children mentioned this. A few children said they didn't like their teacher because she "gave a lot of work."

The teachers' perspective. Implicit in teachers' descriptions of individual children in their classes are conceptions of what makes a good student. Themes of task orientation dominate teachers' descriptions of the children. Teachers, like the mothers in our study, were overwhelmingly oriented toward behavioral characteristics in their descriptions of a good student. When teachers were asked what individual focal children were like in whole-group lessons, virtually none of their responses had to do with the content of the children's contributions or the level of children's understanding. Instead, teachers gave descriptions like "disruptive," "day dreams," "quiet," "distractable," and "attentive."

Teachers' responses to questions about children's independent work similarly centered on behavior and task orientation. During independent work, teachers described the children as "needs prodding," "conscientious," "tried," "slow," "talks to friends," "sometimes does it, sometimes doesn't," "works to get it done," "orderly." In 1981-82, only three children's teachers mentioned more cognitive traits: "not afraid to ask for help," "well organized," and "poor penmanship."

Response to several other questions on the teacher questionnaire also reveal teachers' views of a good student. When teachers were asked for the most important factor for each focal child's reading achievement, the factor most frequently mentioned, for 60% of the focal children, was motivation. Motivation was mentioned more frequently than the child's own ability, the school or home factors. When teachers were asked to describe children's weaknesses in reading, they spontaneously mentioned motivational factors for 31% of the children the first year and 38% of the children the second year.

Some of the motivational problems teachers mentioned for children's reading were "not very involved," "has trouble getting work done," "lacks self-confidence," and "careless, rushes." What is interesting about some of the kinds of problems mentioned is that they seem to reflect a view that reading is getting assignments done. In the first year, "rushes to finish assignments" was the most frequently cited problem (for three children); in the second year "not very involved" was most often cited (five children).

Individual Children at School

Enjoyment of school. Both parents and children were asked about the child's enjoyment of school. Most mothers and fathers thought their children liked school and wanted to go. Another one-quarter of the mothers and one-third of the fathers indicated the child had mixed feelings, sometimes liking it and other times not liking it. A majority of the children, both above-average and below-average readers, said they liked school. A few of the children had mixed feelings and said they liked school some of the time. A quarter of the children said they didn't like school. For the most part, the children felt that school is important "if you want to get a good job." Only one child (a sixth-grade below-average reader) said that she did not think school was important.

For the children, enjoying school was influenced in part by feelings about particular subjects they took. About a third of the children, both above- and below-average readers, said their favorite subject was math. Another third of the children, especially second graders, mentioned art. About a fifth of the children said that reading (or phonics) was one of their favorite subjects. Most of the children mentioning reading as a favorite subject were fourth graders, and with one exception, all of them were above-average readers. No second-grade child said that reading was a favorite subject.

About 20% of the children said their least favorite subject was math. Approximately equal numbers of children mentioned the following subjects as their least favorite: science, music, social studies, spelling and English. When asked why, their most frequent explanations were "It's too hard," "I don't understand it," or "There is too much work." Only a few children gave "boring" as a reason. Clearly, the childen didn't like the subjects that were too hard for them.

The most popular classroom activities for our focal children (according to their teachers) were reading silently to themselves (13 children) and playing board games or word games (12 children). No single subject was mentioned by parents more frequently than any other as being the child's favorite. Virtually all the mother-father pairs who responded to this question disagreed on both what subject the child liked and on what the child disliked.

School attendance. An indication of how important school is to children and their parents is the amount of time children are allowed to miss from school. Eighty-three percent of the mothers and 60% of the fathers felt it was "not okay to keep children out of school to help out at home," even once in a while. In three-quarters of the cases where the parents disagreed on this issue, it was the father who thought it was okay.

Eighty percent of the children said they missed school just every once in a while. A fifth of the children, evenly divided between above- and below-average readers, said they missed "quite a bit of school." Actual attendance records tend to support the children's perceptions of how often they missed school. Children who said they missed "quite a bit" of school were absent on average of 35 days in the first year of our study; the children who said they were only absent every now and then missed an average of seven days. Focal children as a group had relatively few absences; an average attendance was about 93% in the first year of the study. Except for two children who were absent 66 and 57 days respectively, no child missed more than 18 days. In the second year of the project, the average school attendance of our focal children was 92% (165 out of 180 days). One child was in school only 92 days and missed almost as many (88 days).

There was a significant difference between above- and below-average readers in how they said they felt when they missed school. Below-average readers at all grade levels worried more about missing school than above-average readers ($x^2 = 4.32$, $p < .05$). Attendance for the two groups was similar: below-average readers had an average of five absences in the first year of the study and above-average readers an average of seven.

About 30% of the children said their parents didn't mind if they missed school and that their parents let them miss school even if they were not sick. Half of the above-average readers said their parents let them miss school every once in a while, whereas only two below-average readers said their parents let them miss school. Significantly more fourth and sixth grade children said their parents minded if they missed school than did second grade children ($x^2 = 5.38$, $p < .05$). Some of the childen who said they were allowed to miss school cited very special reasons; for example, one above-average sixth grader said she was allowed to miss school when the Tall Ships came to Boston, an event that rarely happens. On the other hand, one of our truant children regularly went on housecalls with his handyman father. His father said, "I'm too easy on the kids. They get away with everything. Sam's been out of school 42 days this year comin' on jobs with me."

Attitudes about schoolwork. Children varied in their attitudes toward the amount and difficulty of the schoolwork they had. Only one child said she thought school was "really hard"; 38% of the children said school was "pretty hard" and 59% said it was "not so hard." When asked how much work there is to do at school, less than a fifth of the children said, "just the right amount." About half said there was "a lot" of work, and 30% thought there was too much to do. Significantly, more below-average readers said there was "too much" work to do at school than above-average readers ($x^2 = 6.409$, $p < .05$).

Thirty-eight percent of the children described themselves as working "real hard" in school. Another 41% said "pretty hard." Less than a fifth of the children said they didn't work hard in school. Almost half the children, equally divided between above- and below-average readers, said they thought their parents wished they would work harder in school. About a third, again equally divided between above- and below-average readers, said their parents thought they worked hard enough already. Parents were more generous in rating their children's efforts in school than the children themselves were. About half of both mothers and fathers felt that their own children tried very hard in their schoolwork. A quarter felt that their children were doing average and another quarter not trying hard at all. There were no significant differences in this between parents of above-

and below-average readers or parents of second, fourth, and sixth graders. Mothers' characterizations of their children in the first year tended to match teachers' descriptions of children's classroom behavior. For example, all of the children whose teachers described them as highly motivated had mothers who said they tried hard in school. All the children who teachers described as "univolved" or "day dreamers" had mothers who termed them "shy." Fathers had judgments of their children's school behavior less like teachers' perceptions. Some of the children fathers described as "shy in school" were said to be "active and involved" by their teachers.

Parents' contribution to children's school success. The focal children and their teachers were asked about families' contributions to success at school. Two-thirds of the children said the amount of attention their parents paid to their school work was "fine as is." About a third of the children, mostly above-average readers, said they wished their parents paid more attention to their schoolwork. None of the children said they wished their parents would pay less attention. The majority of mothers (80%), but only about half of the fathers, said their child talks to them about school.

Two-thirds of our focal children's families were seen by teachers as having made a positive contribution to children's school success. Both years of the study, teachers of 75% of the above-average readers said the home had made a positive contribution to the child's academic progress. Fewer below-average readers' teachers said the child's home had made a positive contribution - this was mentioned for 55% the first year and 40%

the second year. There were differences in teachers' perceptions along racial lines as well. In the first year of our study, teachers mentioned the contribution of the home to reading achievement for 75% of the Black children. However, in the second year teachers only mentioned the home's contribution for 25% of the Black children, but for 50% of the white children, despite similar observers' ratings of Black and white families' provision of literacy materials. Once again, the second-year teachers, who had not participated in selecting focal children, had less positive impressions of them, and especially had less positive impressions of the Black children.

Perceptions of school achievement. Parents and teachers were also asked about the child's achievement, how the child was doing in school in general and specifically whether the child was reading and doing math on grade level. Most parents seemed to think that their children were doing average or better than average in school, compared to most other children their age. For fathers, this was true regardless of whether the child was an above-average or below-average reader. However, mothers of above-average readers were more likely to think their children were doing better than average work, while mothers of below-average readers thought their children were doing just average ($x^2 = 13.67$, $p < .01$).

About half the mothers thought their children had about the same problems learning to read as other children their age. The other half of the mothers were split between saying fewer and saying more. Very few fathers thought their children had had more problems than other children in learning to read. Mothers of below-average readers were more likely to say their children had more problems and none said their children had fewer problems.

Mothers tended to be more knowledgeable about their children's experience of learning to read in school than fathers; mothers' and teachers' judgments about children's school achievement were fairly similar. Mothers of all of the children who were rated weaker than average in reading by the teacher said their children had average or more problems than average learning to read. But two of the children rated weaker than average in reading by teachers had fathers who claimed they had fewer problems than average in learning to read.

Over three-quarters of both mothers and fathers thought their children were doing math on grade level. Only half of the mothers were accurate in their judgment about whether their children were doing math on grade level - the same proportion which would be expected by chance. Parents were only slightly more accurate in thier judgments about reading achievement. Over two-thirds of the mothers and three-quarters of the fathers thought their children were reading on grade level. Sixty-one percent of the mothers were accurate in answering the question, "Is your child reading on grade level?" Mothers of sixth graders were less accurate in their judgment than mothers of younger children in our study.

Mothers of above-average readers were twice as likely as mothers of below-average readers to think that their children were reading on grade level. Parents' judgments often included references to children's out-of-school uses of literacy; as one mother of a below-average reader said, "She can read teen magazines fine. . . just has trouble with books on history and science that don't interest her." Or this, "He's not bad at reading; he gets the gist, but the words get a little fouled up."

For fathers there was no difference; most seemed to think their children were reading on grade level, regardless of whether the children were designated as above- or below-average readers by us. The children themselves also assessed their own reading level. About 20% of the children thought they read "very well." Fifty percent said they thought they read "pretty good," and 31% said "fair."

Teachers' perceptions of focal children's skills shifted from the first to the second year of the study. This is not surprising, since first-year teachers played a part in selecting students for the study and their ratings of focal children's skills contributed to our designations "above average" and "below average" readers. In the first year about half of the children who we designated as above-average readers were rated as "better than average" readers by their teachers. However, in the second year, only 13% of above-average readers were rated as "better than average" by their teachers.

Changes in teacher perceptions were especially marked for minority children. In the first year, about one-third of both Black and white children in our study were seen by their teachers as "better than average" in reading; in contrast, in the second year, none of the Black children but 24% of the white children were seen as better than average.

Grades. One way that parents develop perceptions about their children's school achievement is through grades - the one way the schools communicate with all families. Children were asked what kind of grades they got in school. Three-quarters of the children, equally divided between above- and below-average readers, said they received mostly "Bs" (or the equivalent grade of "G" for "good") on their report cards. A fifth of the children said they received mostly "As." Twice as many above-average readers as below-average readers said they got "As." Only two children, both below-average readers, said they received "Cs" or "Ds" on their report cards. Not surprisingly, most of the children (84%) said they liked the grades they got. A small percentage (9%) felt that they weren't doing their best work and they could get better grades. Even fewer felt they were unable to get better grades. Most of the children (88%) also said that their parents liked the grades they got. More children at all grade levels said they received their best grades in math than in any other subject.

Parents were asked what kind of grades their children were getting in reading and math. There was a significant difference between mothers of above-average and below-average readers in whether they reported the children as getting A/Bs or C/Ds in reading ($x^2 = 4.49$, $p < .05$), but there was no difference in perceptions of fathers of above- and below-average readers.

Contacts Between Parents and Teachers

Parent-initiated contacts with schools. Parents in our study had a relatively high level of involvement with their children's schools, particularly with the classroom teachers. Over three-quarters of the mothers and half of the fathers, when asked, immediately knew their children's teachers' name. All of the parents interviewed said that their children brought papers home from school. Sixty-five percent of the families initiated some kind of contact with their children's classroom teachers; over half of the families in the study visited the school to talk to the teachers and others sent notes or telephoned. Parents of above-average readers were no more likely to initiate these contacts than were parents of below-average readers; and parents with high educational aspirations for their children were no more likely to than parents with more modest aspirations. However, mothers who thought their children were having more problems than average with schoolwork were more likely to initiate contacts with the teachers than mothers who thought their children were doing average or superior work. Mrs. Gallagher's comment that she didn't get in touch with the school because her kids were all on the honor roll is typical. Not surprisingly, mothers who were most critical of their children's teachers were less likely to try to contact them, and parents who knew the teacher from some other context - living in the same neighborhood, as former teacher of other family members - were more likely to initiate contacts.

The mothers who actually contacted their children's teachers were not necessarily the ones for whom it was easiest to do so. Families in which the mother worked were actually more likely to telephone, visit, or send a note to the teacher than those in which the mother was at home. More mothers who said it was "not so easy" or "not easy at all" to get child care or time off from work to get up to the school actually did so and fewer of the ones who said it was "very easy" did. The more literate mothers and the mothers who did more to provide literacy materials for their children made no more contacts than the less literate mothers or the mothers who observers rated lowest on their provision of literacy materials for the children.

Parent-initiated contacts both years of the study most frequently were inspired by concerns for the children's academic progress (this contrasts with the content of teacher-initiated contacts, discussed below). Some teachers welcomed these contacts; for example, a second-grade teacher who spoke of a new "partnership between home and school" resulting from contacts initiated by one child's family. Others were more guarded, saying they "didn't mind it" when focal children's families visited them or telephoned. When parent-initiated contacts occurred, they seemed to have positive effects on teachers' expectations for the target child. In the first years of the study, teachers were significantly more likely ($x^2 = 4.32$, $p < .05$) to expect children of families who'd contacted them to go on to a four-year college compared to children of families where there were no parent-initiated contacts. Teachers also had a more positive view of families' contributions to literacy for children whose parents had initiated contacts.

Other school involvement. While the majority of families were in contact with the classroom teacher, many fewer were involved more formally with the school. Many parents did not have much knowledge of PTAs, class meetings or parents' nights. About half of the mothers reported never going to PTA, about one-quarter went one time and one-quarter two or more times. Fathers who we were able to interview were somewhat more involved in PTA, three quarters of them attending at least once, with a range of one to six sessions attended. Most mothers never went to school-related committees, attended special school programs or plays or helped out with field trips or class parties. Three mothers and one father had significant involvement as volunteers; two were working parents, one a welfare recipient, and one a non-working mother in a fairly prosperous family.

Teacher-initiated contacts with families. In the first year of our study 60% of the focal children's families were contacted by the teacher (in the second year the proportion was 50%). Both years the most common mode of contact used by teachers was notes (for about 47% of the children's families) and the telephone (about 38% of the families). Two families were seen in person, in one case because the mother was a regular classroom volunteer and in the other because the grandmother lived across the street from the school. Numbers of teacher-initiated contacts with each family ranged from 0 to 30 in the first year of the study, with an average of three per family. In the second year the range was 0 to 15, with an average of two.

The content of contacts shifted from the first to the second year. In 1980-81, teachers, like parents, were most likely to initiate contacts about the child's academic progress, while in the second year only half as many families were contacted about academic concerns as had been in the first year. In 1981-82 teachers were most likely to contact parents about behavior problems. Both years teachers also contacted families about special education services (two children), problems in completing homework (two children both years), and excessive absences or tardiness (three children the first year; four the second).

For 90% of the focal children, teachers who made contacts named a particular family member with whom they communicated. For eleven children it was the mother, for two the father, and for three children some other adult, usually a grandparent. Two children's teachers regularly communicated with both parents.

Only about a quarter of the focal children's teachers felt there were obstacles in communicating with particular families. In the case of two families teachers felt there was a language barrier, for two families "parental indifference" was seen as an obstacle and for three children the parents' work schedule was a barrier.

Both years of the study teachers initiated more contacts and were more likely to make contact with families of poor readers (67% of the below-average readers' families were contacted compared to 53% of the higher readers'). Teachers had two to three times as many contacts on the average with the families for below-average readers both years. Teachers were less likely to contact parents of Black children, although Black parents on their own initiative made as many or more contacts as white parents did. In the first year of the study, teachers made an average of 1.6 contacts with the families of Hispanic children, 2.1 with families of Black children, but 3.7 with the white children's families (for the second year the averages were 1.5, .90 and 2.4 respectively).

The content of teacher-initiated contacts also varied according to characteristics of the child. In the second year of the study, 75% of the contacts with Black families were about behavior problems, compared to 50% for white families. Both years teachers had higher proportions of contacts with families of boys about academic progress than for families of girls. In the first year 36% of the boys' parents but only 19% of the girls' were contacted about the children's schoolwork; in the second year 23% of the boys' and only 8% of the girls'. These contact differences may well be related to different teacher patterns of educational expectations discussed below.

Teachers generally felt that the contacts they initiated with families had positive consequences for the child; about 70% of the contacts were rated "effective" each year. One teacher said, for example, after repeated contacts with the family, "I started seeing changes (in the child's homework) about midyear; it turned itself around." Teacher-initiated contacts, like parents', had consequences for the schools' view of the children. Teachers were more likely to mention the home as a positive factor in the reading achievement of children whose families they'd contacted over the year. Families who had been contacted by the teacher were in turn more likely to initiate contacts themselves, especially when these teacher contacts were about academic rather than behavior problems. Children whose families were contacted by the teachers were much more likely to be moved up in reading group assignment than those who were not ($x^2 = 6.28$, $p < .05$).

Homework

A major point of overlap between home and school is homework. It is used explicitly by many teachers as a way of communicating to parents about what goes on at school, and as a way of giving parents information about their children's progress. Homework is viewed by many parents as the focus of their own responsibilities for their children's school achievement; they must ensure that their children's homework is done correctly, neatly, and on time in order to discharge their responsibilities as concerned parents.

Teachers, parents, and children all believe that homework is an integral part of the school experience. Each group was asked questions about the amount and type of homework, where and when it was done, who helped and how useful the help was, whether it was turned in on time. They were all also asked about their attitudes toward homework.

During the first year of the study all the fourth-grade children and most of the sixth-grade children reported having homework to do. Only half of the second-grade children said they had homework, however. A majority of the children (65%) said they thought homework was important. However, a quarter of the children, both above- and below-average readers in fourth and sixth grades, said it was not. The remaining children said "it depends," but did not elaborate why. Asked what happens if you don't do your homework, children responded in a variety of ways: "You'd have to do it the next day," "you'd get a bad grade," or "you'd get punished by the teachers." A few children said, "You wouldn't learn as much."

Amount of homework. During the first year of the study, the children in fourth and sixth grades said they had homework every day or every other day (with one exception). The handful of second-grade children who reported having homework said it ranged in frequency from every day to "every so often." Teachers' reports of how frequently the children got homework were very similar to what the children said.

During the second year of the study, mothers of a third of the children said their child had one or more hours of homework each day. Most of the children with more than an hour of homework were fifth graders. Third graders had less homework. The bulk of their mothers said they had homework two to three times a week. There was a greater range in mothers' reports of time spent on homework for sixth graders than for younger children.

During the second year of the study, teachers said that 55% of the children had homework every school night and another 28% had it two to three times a week.

Type of homework. Teachers and parents were asked what kind of homework the children received. According to the teachers, children in the upper grades had homework in more subject areas than did the younger children. Third-grade children typically had homework in three subjects, fifth graders had it in three to four subjects, and seventh graders were said by their teachers to have homework in five subjects.

According to the mothers and fathers the most common type of homework the children had to do during the second year of the study was math. This was true at all grade levels. In addition, one or two parents at each grade level said their children had reading homework; a few parents of third and fifth graders reported their children had spelling homework, and several parents of fifth and seventh graders said the children had social studies homework. Mothers of all the seventh graders and mothers of all but two of fifth graders said their children brought home textbooks for use in homework. However, no third graders brought home textbooks.

There was agreement between teachers and parents that math was the most common subject for homework. However, more teachers than parents said that the children had reading homework. During the first year, the most frequent kind of homework was a textbook assignment with accompanying questions, but in the second year, workbook and writing assignments were the most common types. None of the third graders had homework involving reading assignments with questions, whereas approximately three quarters of the fifth and seventh graders had this kind of homework.

Where and when homework was done. Seventy-five percent of the children who had homework during the first year had time during the day to complete it, according to their teachers. During the second year, only 53% of the children had time during the school day to do homework.

About half the children who reported they had homework to do said they did it at home. However, nearly a third of the children said they did their homework at school. The rest of the children told us they did their homework both at school and at home. Different children in the same classrooms reported doing their homework in different places.

About half of the mothers and two-thirds of the fathers said their children did their homework at nearly the same time every school day. This did not vary with the grade level of the children nor with their reading ability. Slightly fewer than half of the children responding said they had a special time or a special place to do their homework. Of these, only six children (three above-average and three below-average readers) said they did their homework in the same place at the same time every day. A few children said they did their homework in their own rooms. The rest did it in the kitchen, or in a corner of another room in the house. One child said she did it "wherever it's quiet."

About half of the mothers of the fifth- and seventh-grade children said that their children watched television and did homework at the same time. This was true for both above- and below-average readers. But no mother of a third-grade child said that her child did both at the same time. About a third of all the mothers responding said their children listened to the radio or stereo while doing homework. This was true for children at all grade levels and for both above- and below-average readers.

Who helps with homework. Most children said they usually either go for help when they get stuck on homework or try to figure it out on their own. Only two children, both below-average readers, said they would quit if they got stuck. Mothers said that their children needed help with homework once a week or less, except in one case when help was given four times a week. During our first interviews with parents, we asked if they had given their children help with homework the previous day.

Only a quarter reported they had. In each case they had spent less than one half hour helping their children.

In the first year of study, teachers' and parents' reports of who helps with homework were similar: the families in which mothers said they helped once a week or more were all seen by teachers as helping, while families in which mothers said they helped less often were not seen by teachers as helping. In the first year 54% of above-average readers and 50% of below-average readers were seen by teachers as getting help from their families on homework. In the second year, significantly more above-average readers (62.5%) than below-average readers (11%) were seen by their teachers as getting help at home on homework ($x^2 = 4.89$, $p < .05$). Both years' teachers were less likely to think that parents of Black children helped with homework than parents of white children. In the first year of the study, teachers were more likely to contact families who they felt did not help with homework, while in the second year, the opposite was true.

There was fairly high agreement among mothers, fathers and children as to who helps the child with homework. The majority of mothers said the children came to them for help. This was true in two-parent households as well as in single-parent households. A few mothers said the focal children went to the fathers for help, to either parent, or to a parent or a sibling. Half of the fathers who provided information on this said they helped their children with homework. In families where both parents were interviewed about homework, in each case where the father said he helped with homework, the mother agreed with this.

Children's perceptions of usefulness of parental help. Not all the children found their parents' help with homework useful, however. Over half said their parents gave them good help, but about a third of them said their parents' help was usually confusing and a few said their parents' help was "sometimes helpful and sometimes not." One child said his parents couldn't help him sometimes, "because it's hard homework." Another said that sometimes her parents couldn't help because they "forget how to do it." Above-average readers were as likely to report their parents' help was confusing as were below-average readers.

A third of the children reporting parents' help was confusing were from homes in which English was not the native language, but parents' educational level was not related to whether their children reported that parents' help was confusing.

Siblings' help with homework. We asked parents if anyone else helped the child with homework. Virtually all the parents said that younger children in the family received help from their older siblings. Children from large families tended to get help from one or two siblings in particular. According to the mothers, over half of the children got help from one sibling, a third received help from two different siblings and one child received help from more than two siblings. Children also turned to their friends and to extended family members for help with homework.

One younger sister of a child in the study said that the two of them "switch for each other, like she'll do my homework if I sweep the kitchen floor for her." Another child told us that when she needs help with homework, her brother is "usually the one around." This same older brother said that she "might ask me to check her math or to test her on vocabulary words."

Promptness of turning in homework. Over half of the children said they usually turned their homework in on time. Forty percent said they sometimes turned it in late. Only one child, a sixth grader, said he turned in his homework late a lot of the time. Significantly more above-average readers said they turned their homework in on time than did below-average readers ($x^2 = 4.57$, $p < .05$). It is interesting to note that each of the children who said they didn't think homework was important reported that they turned in their homework on time.

Seventy-four percent of target children who got homework the first year (and 70% the second year) did it on time, according to their teachers. In the first year, 86% of the above-average readers and 55% of the below-average readers did it on time ($x^2 = 2.58$, $p < .10$); however, in the second year the gap narrowed. Seventy-seven percent of the above-average readers and 62% of the below-average readers did their homework on time, according to their teachers.

Teachers' and parents' views of homework. Teachers expressed concern about the type and amount of homework they gave. Somewhat more than half of the children's teachers the first year and about a quarter of the children's teachers the second year said they would like to give more homework than they do now. Problems in giving more homework mentioned by teachers included lack of parental support and children's unwillingness to do more work. One teacher wanted to give more homework, but felt it wasn't generally accepted at the grade level she taught (second grade). Another teacher thought that the kind of homework children in her school were used to doing - worksheets and workbook exercises - was unimaginative, but she had had trouble organizing other types of homework, for example, having parents read aloud to children or help them with science projects.

Some parents were confused about what their role in offering help should be. Mr. Simms said, for example, "The system is different from when I was growing up. The teacher advised not to try to help Joanne as it might confuse her."

Despite teachers' frequent mention of lack of parental support for homework, several parents said they asked teachers to give them materials to use with their children at home. One mother told us, "Ever since my oldest child's third-grade teacher called up to say he'd forgotten his addition tables, I have worked with the kids during the summer so they don't forget." A mother of a below-average reader in the sixth grade described how she goes over things with her daughter before she does her homework: "When she reads ancient history she doesn't know the words and it puts her head in a whirlwind. So I make her read each sentence aloud to help keep track of things. Then I ask her to say what it meant in her own words." Other parents complained that teachers didn't assign enough homework. They saw it as a reflection of teachers' laziness or lack of interest in the children's progress. One mother complained of this, and added that she was willing to help. "If they bring home math work I help to pound it into their heads."

Educational Expectations

Educational expectations for a child are a source of possible conflict or cooperation between home and school. Teachers both years of our study were asked what educational level they expected each focal child to attain. Not surprisingly, teachers had higher expectations for above-average than below-average readers, particularly in the first year of the study, when teachers had helped assign children to these categories. Sixty-four percent of the above-average readers were expected to graduate from college this year, but only 15% of the below-average readers were.

Teachers in the second year of the study, who had fewer contacts with families and who had not participated in selecting children for the project, had much lower educational expectations for the focal children. Second-year teachers only expected 36% of the above-average readers to graduate from college (and 20% of the below-average readers). Both years of the study, teachers' expectations were lowest for the oldest group of focal children - the sixth and seventh graders - 22% of whom were expected to go on to a four-year college by their 1980-81 teachers, and none of whom were expected to go on to college by the 1981-82 teachers.

Teacher Expectations

1980-81

Second graders

37.5% high school graduate
62.5% college graduate or above

Fourth graders

10% high school drop out
50% technical or community college
40% college graduate or above

Sixth graders

11% high school dropout
55% high school graduate
11% technical or community college
22% college graduate or above

1981-82

Third graders

66% high school graduate
34% college graduate or above

Fifth graders

25% high school drop out
25% high school graduate
50% college graduate or above

Seventh graders

12.5% high school dropout
75% high school graduate
12.5% technical or community college

In the first year of the study, racial and sexual differences in teachers' educational expectations for children were minimal. The teachers in the second-year, on the other hand, thought 30.8% of white children would go to college but none of the Black children would (despite similar proportions of Black and white above-average readers in our study). A third of the boys were seen by second-year teachers as going to college, but none of the girls in the study were.

Expectations of teachers in the second year of the study were also more likely to be lower than mothers' or than the first-year teachers'. Second-year teachers agreed with mothers about educational expectations for individual children only 16% of the time, while responses of first-year teachers and mothers were congruent in 42% of the cases. Compared to second-year teachers, mothers had higher expectations for 12 out of 19 children (63%). Compared to first-year teachers, in 9 of 24 cases (37.5%) the mother had higher expectations. Seven of these nine children were below-average readers. In most cases where expectations of teachers were higher than those of mothers, the children involved were above-average readers.

Seventy to seventy-five percent of mothers and fathers said that getting a college diploma was a goal they had for their children. Fifty to sixty percent of parents expected their children to finish college; the others all expected their children to graduate from high school. One mother said, "I want them all to go through college. This is an Irishman's dream"; another mother commented, "As long as I'm alive, they're going to go all the way" (meaning graduate from college). Our most disabled reader said of her parents, "All I know is they want me to finish college." The mother of another below-average reader summed it up this way: "The further you go in school the better job you get. I tell her, 'Finish college or you'll live in a dump like this all your life.'"

Summary

Parents', teachers' and children's views about school from interview data are contrasted. While parents had varying views about the most important thing a school should teach, parents of above-average readers thought discipline was the most important goal, and parents of below-average readers thought reading was. The characteristics of a good teacher most commonly mentioned by parents were "caring and conscientious," and a majority of parents felt that effort and attendance were the main qualities of a good student. In the teachers' view, a good student was one who was oriented toward school tasks and who was quiet, attentive, and conscientous. Children liked teachers who were "nice" and "didn't yell."

Most parents felt that teachers and facilities of the schools their children attended were about average compared to others in the area. Most children enjoyed going to school and average attendance was high. Below-average readers were more likely to think there was too much work at school and were more likely to worry about missing school than above-average readers. Eighty percent of the children described themselves as working "real hard" or "pretty hard"; yet half the children thought their parents wished they would work harder.

Most parents thought their children were doing average or better than average work in school, compared to agemates. Mothers were more accurate about their children's school achievement than fathers were, both in judging children's difficulties learning to read and current math and reading levels. Most children thought they were doing fine in school and liked the grades they got; three-fourths said they got mostly Bs.

In the first year of the study, teachers considered about one-third of both Black and white children as "better than average" in reading. In contast, in the second year, teachers named none of the Black children and 24% of the white children as better than average (in spite of equal proportions of Black and white focal children scoring above average on standardized tests).

The teachers thought two-thirds of our children's families had made a positive contribution to children's school success. Teachers were more likely to mention the positive contribution of the home for above-average than for below-average readers. Despite similar observer ratings for provision of literacy in Black and white families, teachers in the first year of the study were much more likely to mention the home's contributing for Black than for white children; the pattern was reversed in the second year when teachers were more likely to mention the contribution of the home for white children.

For parents in our study, the most common form of involvement with their children's school was contact with the classroom teachers. Sixty-five percent of our families initiated contact with the classroom teacher; half attended at least one PTA meeting. Parent-initiated contacts were inspired most often by concern for the children's academic progress: Mothers who thought their children were having problems with schoolwork were more likely to initiate contacts than mothers who thought their children were doing fine.

Fifty to sixty percent of focal children's families were contacted by the teacher. Teacher-initiated contacts ranged from 0 to 30 per family.

With the parents of boys, teachers were most likely to initiate contacts about the children's academic progress, while with girls' families, teachers were more likely to make contacts about the children's behavior problems. Teachers had two-to-three times as many contacts with the families of below-average readers. Teachers were less likely to contact parents of Black children than white children, although Black parents on their own initiative made as many or more contacts with teachers as white parents. Teachers' contacts with families had positive consequences for the child.

All fourth graders, most of the sixth graders, and half of the second graders reported having homework. Most children got help with homework from both parents and siblings. Half said their parents gave them "good help," but a third found their parents' help confusing. Whether the help was seen as confusing was not related to either the parents' educational level or the children's reading level. Above-average readers were significantly more likely to turn in their homework on time than were below-average readers, according to both child and teacher reports.

Teachers in the first year of the study expected a third of the children to graduate from college, and they had significantly higher expectations for above-average than for below-average readers. Race and sex differences in their expectations were minimal. Teachers in the second year had generally lower expectations than did first-year teachers for both above- and below-average readers. Furthermore, they expected no Black children or girls to attend college. Three-quarters of mothers and fathers hoped that their children would graduate from college, and 50-60% of them expected the children to actually do so. Mothers had higher expectations for their children then did teachers, especially teachers in the second year of the study.

Chapter 6

Reading Tests

This chapter presents the findings from the pupils' reading test scores. Chapter 7 presents findings from the writing samples and the language tests, and relates the findings from all three types of measures. Chapters 8 and 9 will further relate home and school factors to the reading, language and writing measures.

The instruments used for the reading analyses are the subtests of an experimental edition of the reading assessment test (Roswell and Chall, in press) with a range of difficulty for reading levels 1 to 9, designed for individual administration. The test is composed of 6 subtests of various aspects of reading: word recognition, oral reading, phonic screening, word meaning, silent reading, comprehension, spelling. Based on validation studies of hundreds of children, each of the subtest scores can be converted into a criterion score (i.e. grade level) and a total score. Both are used in the reading analyses for this study. We have relied particularly on the criterion scores (grade levels) for the analysis of trends in development by grades, and for comparison of achievement of the present population with others their age and grade placement.

One of the major objectives of the study was to investigate the process by which these low SES children enter the stage of using reading for "learning the new." (Chall, 1983). Past studies have found that beginning around grade 4 or 5, reading test scores of low SES children tend to decelerate with increasing grade placement (Coleman, 1964; NAEP, 1981). The various analyses reported below have been designed to answer questions related to this issue.

Patterns of Deceleration

The first analyses were designed to determine whether the low SES children in the present study followed a similar pattern of deceleration of reading development beginning at about a 4th or 5th grade, as reported in the literature.

Our analysis was based on the following data:

> A comparison of first year (1981) reading scores obtained in grades 2, 4, 6 (a cross-sectional comparison). Tests were given in May when the expected norms would be 2.8, 4.8, and 6.8.
>
> A comparison of second year (1982) reading scores in grades 3, 5, 7 (a cross-sectional comparison). Tests were given in May when the expected norms would be 3.8, 5.8, and 7.8.
>
> A comparison of pre (1981) and post-test (1982) scores for grades 2-3, 4-5, 6-7 (a longitudinal comparison over a one-year period).
>
> A comparison of scores of above and below average pupils for each grade.

Since the samples of pupils in each grade were small (about 10 at each grade)* these various analyses were undertaken as a means of confirming or disconfirming the results found. Thus, it was believed that the two cross-sectional comparisons might serve to confirm or disconfirm each other, and they they could further be verified by the year's gains found on the pre- and post-tests.

The above/below average comparisons for each grade would, we hoped, give additional evidence of change in reading achievement within each grade. In the above/below average data we would look for patterns among

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*The exact number tested appears on p. 7-2. It should be noted that the number differed somewhat, with the largest sample in grade 4. There was a further variation in the above and below average readers in each grade sample. Thus, the largest percent of above average readers were in the grade 4 sample.

(footnote continued on pages 6-2a and 6-2b)

Because the numbers of children in grades 2, 4 and 6 varied somewhat (See Table 7-2, Chapter 7) as did the number of above and below average pupils, and because with such small samples we need to exclude the possibility that they differed for sampling rather than for developmental reasons a covariance analysis was to assure that various gains and developmental trends found could not be attributed to the sample differences.

Reading scores from the Metropolitan Achievement Test for each of the 30 children when they were in the 3rd grade (Baseread) were co-varied with a writing measure (production) and with the reading test scores.

Table 6-0 which presents the basic data on the co-variance results indicates that the groups (Grades 2, 4, and 6) did not differ significantly from one another on their third grade reading skills. Thus, the analyses of covariance including baseread as the covariate did not produce results different from the original analyses of variance.

Table 6-0

Analysis of Variance

Reading and Writing Pre and Post Tests Covaried on Baseread

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Covariates Baseread	213.731	1	213.731	0.520	0.479
Main Effects	12451.797	3	4150.598	10.100	0.000
Reading Level	3726.742	1	3726.742	9.069	0.007
Grade Level	8725.055	2	4362.527	10.616	0.001
2-Way Interaction	109.48	2	54.74	0.133	0.876
Explained	12775.020	6	2129.170	5.181	0.002
Residual	8629.633	21	410.935		
Total	21404.652	27	792.765		

the below average group of 6th graders for example, that might resemble the patterns for the above average 4th graders.

Do the reading scores decelerate after grade 4? Table 6-1 presents the mean scores for grades 2, 4 and 6 (the pretests, administered in 1981) on two of the reading tests administered -- word recognition and silent reading comprehension. The table also contains the deviations of the mean scores from the expected norms in grades 2, 4 and 6. Since these tests were given in May of the school year, 2.8 would be the expected norm for the 2nd grades, 4.8 the expected norm for the 4th graders, and 6.8 for the 6th graders.

From Table 6-1, there appears to be a deceleration on both tests by the 6th grade. The word recognition scores seem to begin decelerating earlier with an average deviation of -.3 at grade 4. Silent reading comprehension increases from grade 2 to grade 4 when compared to expected norms, but decelerates in grade 6.

Table 6-2 presents the means for the above and below average pupils on word recognition and silent reading comprehension, together with deviations from the expected norms. From Table 6-2 we note a considerable difference in the course of development for the above as compared to the below average pupils. Deceleration (beginning around Grade 4) is already evident for the below average groups on both reading components -- word recognition and silents reading comprehension. In May of 1981, the end of the first year of our study, the below average pupils of grade 4 are one year below expected norms in word recognition but on expected norm for silent reading comprehension.

TABLE 6-1

Means and Deviations from the Norms on Pretests (1981) - Word Recognition and Silent Reading Comprehension

	Word Recognition		Silent Reading Comprehension	
	Mean Scores	Deviations from the norm	Mean Scores	Deviations from the norm
Grade 2	2.7	-.1	2.9	+.1
Grade 4	4.5	-.3	5.5	+.7
Grade 6	6.1	-.7	6.6	-.2

TABLE 6-2

Mean Scores and Deviations from Norms for Above and Below Average Pupils on Pretests (1981) Word Recognition and Silent Reading Comprehension

	Word Recognition				Silent Reading Comprehension			
	Above Average Pupils		Below Average Pupils		Above Average Pupils		Below Average Pupils	
	Mean Scores	Deviations From The Norm	Mean Scores	Deviations From The Norm	Mean Scores	Deviations From The Norm	Mean Scores	Deviations From The Norm
Grade 2	2.7	-.1	2.7	-.1	2.8	0	2.9	+.1
Grade 4	5.1	+.3	3.8	-1.0	6.0	+1.2	4.8	0
Grade 6	7.0	+.2	5.2	-1.6	7.3	+.5	5.9	-.9

By the end of grade 6, the below average pupils are a year and 6 months below norms on word recognition, almost a year below on silent reading comprehension.

In comparison, the above average pupils are at about the expected norms for Grade 2 on both word recognition and silent reading comprehension. They also seem to stay above the norms in Grade 4 and 6. If there is a deceleration, it may be on silent reading comprehension where the norm in grade 4 decreases from a 1.2 above to a .5 above the norm in grade 6. The tendency seems to be the same for word recognition but to a lesser degree.

Thus, although there appears to be deceleration beginning with Grade 4 (with even greater decelerations at grade 6) for the total grade groups, the extent seems larger among the below average as compared to the above average readers at each grade.

Table 6-3 presents mean post test scores (1982) for the children in grades 3, 5, and 7 -- the retest scores for pupils whose initial test scores were presented in Tables 6-1 and 6-2 when they were in grades 2, 4, and 6.

Table 6-3 also suggests deceleration for both word recognition and silent reading comprehension -- on post tests in grades 3, 5 and 7. Compared to the scores for grades 2, 4, and 6 (see Table 6-1) the post tests seem also to decelerate, but at a later grade -- 7th compared to grade 4 for the pretests on word recognition. For silent reading comprehension, the deceleration at grade 7 is about the same, however, as it was for the 6th graders on the pretests.

TABLE 6-3

Mean Word Recognition and Silent Reading Comprehension Scores on Post Tests (1982) with Deviations from Expected Norms

	Mean Word Recognition Scores	Deviations From Norms	Mean Silent Reading Comprehension Scores	Deviations From Norms
Grade 3	4.3	+.5	4.8	+1.0
Grade 5	6.9	+1.1	7.0	+1.2
Grade 7	7.3	-.5	7.1	-.7

Post-Test Scores

Table 6-4 presents means for above and below achievers on the post test scores. These findings are generally similar to those for the pretests (see Table 2). Both seem to indicate that deceleration is more characteristic of the below average achievers than of the above. Indeed, it appears that the above average pupils maintain their above average scores from the third to the seventh grades and probably higher, on both word recognition and silent reading comprehension. Although there is a slight deceleration in the extent of the positive deviations from the expected norm at grade 7 on silent reading comprehension, this could well be attributed to the upper limits of the test -- about an 8th grade level.

Overall, the pretest scores (grades 2, 4 and 6) and the post test scores (grades 3, 5 and 7) indicate that deceleration is more characteristic of the below average achievers than of the above. But, overall, both cross sectional comparisons tended to find a decelerative trend -- beginning either at 4th or 6th grade.

Post-Test Gains

As further evidence on the question of deceleration, we analyzed the gains on the post tests over the pretests for each child, by grade, by their status as above or below average achievers, and by silent reading comprehension and word recognition. Table 6-5 presents these data. From the table we see a trend toward deceleration both for word recognition and silent reading comprehension with grade. This is seen for the increasing grades and for both the above and below average achievers within each grade. The trends for the above and below average achievers

TABLE 6-4

Mean Scores and Deviations from Expected Norms on the Post Tests (1982)

	Word Recognition				Silent Reading Comprehension			
	High Pupils		Low Pupils		High Pupils		Low Pupils	
	Mean Scores	Deviations From The Norm	Mean Scores	Deviations From The Norm	Mean Scores	Deviations From The Norm	Mean Scores	Deviations From The Norm
Grade 3	4.2	+.4	4.3	+.5	4.5	+.7	4.9	+1.1
Grade 5	7.8	+2.0	5.7	-.1	8.0+	+2.2	5.6	-.2
Grade 7	8.6	+.8	6.0	-1.8	8.0+	+.2	6.3	-1.5

TABLE 6-5 .

Gains on Word Recogniton and Silent Reading Comprehension from Pretests (1981) to Post Tests (1982)

	Word Recognition Years of Gain: ○=Above Average ●=Below Average	Silent Reading Comprehension Years of Gain: ○=Above Average ●=Below Average
Grades 2-3	3	○●●
Number Above Average 4	2 ○○	○●●●
Below Average 6	1 ○○●●●●	○
	0 ●●	○
	-1	
Grades 4-5	4 ○	○
Above Average 7	3 ○○●	
	2 ○○○○●●	
Below Average 5	1 ○●	○○○○●●
	0 ○●	○○●●
	-1	●
Grades 6-7	4	
Above Average 4	3	
Below Average 4	2 ○	○○
	1 ○●	●
	0 ○○●●●	○○●●●
	-1	

tend to be similar to those found for the total grades in the cross sectional data. The below average pupils tend to make lower gains than the above average, and there is a general decline in gains in succeeding grades.

Thus the longitudinal data tend to confirm the cross sectional data. While the pupils in the study are on expected norms in these two major reading components -- word recognition and silent reading comprehension in grades 2 and 3 -- they tend to decelerate with increasing grades (beginning with grade 4 or 5). Further, the deceleration is stronger for the below average achievers as compared to the above average achievers. The deceleration among the below average achievers also tends to begin earlier. Thus, it would appear that at each of the grades studied -- pretest grades, 2, 4, 6; and post test grades 3, 5, and 7 -- those who started strong, continued strong. The strong starters tended to gain more; the slower starters tended to weaken more on successive grades.

The longitudinal data (see Table 6-5) which are based on the yearly gains for each individual, from grades 2 to 3, 4 to 5 and 6 to 7, offer the clearest evidence since they are not influenced by the uneven numbers of above and below average achievers. Since each individual is treated separately, the possible biasing of a grade toward the higher and lower end of the scale is avoided.

A review of table 6-5 indicates the clear trend toward deceleration by increasing grade and by the low achievers within the grade -- essentially a confirmation of the cross-sectional data.

Although the numbers of children are small, it appears that the various analyses reported here -- the cross sectional and longitudinal

(Tables 1, 2, 3, 4, 5) tend to confirm the findings from the others. The scores on all tests combined, from grade 2 to grade 7, tend to show a deceleration beginning around grade 4, 5, or 6 (depending upon the test). The deceleration trend is greater, however, for the below as compared to the above average achievers. Indeed, it would seem that the below average achievers may have accounted for the major portion of the deceleration noted in the total samples for the grades in this study.

Patterns of Growth for Different Reading Components

Pre-Test Data

The second main analysis was undertaken to determine whether characteristic patterns of growth can be found among the different reading components. Do some of the reading components hold up better than others? Do the patterns of components' strengths and weaknesses vary by grade and by above and below average achievers? If so, which test scores show relative increases and which show relative decreases with increasing grades?

Table 6-6 presents the means on the pretests (when the children were in grades 2, 4, and 6) for five reading and reading related components (all subtests except phonics) -- by grade level. From Table 6-6 we note, that for all 5 components a deceleration appears to set in, beginning around grade 4. This can be seen most vividly from the declining differences from the norms at each succeeding grade.

What is quite striking from Table 6-6 is the relative strength of all five reading components at grade 2. All scores are at "grade level"

Table 6-6

Means Test Scores for Grades 2, 4, 6 (cross-sectional) with Deviations from the Expected Norms

	Expected Mean for Grade 2 (2.8)	Difference from Expected Norm	Expected Mean for Grade 4 (4.8)	Difference from Expected Norm	Expected Mean Grade 6 (6.8)	Difference from Expected Norm
Word Recognition	2.7*	-.1	4.5	-.3	6.1	-.7
Oral Reading	3.5	+.7	4.9	+.1	6.7	-.1
Silent Reading	2.9	+.1	5.5	+.7	6.6	-.2
Word Meaning	3.1	+.3	4.3	-.5	4.4	-2.4
Spelling	2.9	+.1	4.6	-.2	6.1	-.7

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*The expected means are the "criterion grade score" for May, the eighth mont of the grade in which the tests were administered. Thus, the expected norm for grade 2 was estimated as 2.8; the expected norm for grade 4, 4.8; and that for grade 6, 6.8.

or above when compared to expected norms. At grade 4, on two components, oral and silent reading, the pupils are still above the expected norms for grade 4. On the other three components -- word recognition, word meaning and spelling -- the mean scores for grade 4 are already somewhat below the expected norms.

The deceleration trend is more consistent from grade 4 to 6, when at grade 6 all 5 components are below norm expectations. The greatest deceleration from grade 4 to grade 6 scores is in word meaning, the component that requires no reading ability per se. The words were presented orally and the student gave his/her definitions orally. These scores at Grade 6 were on the average 2.4 grades below the expected norms.

Thus the deceleration trend with increasing grades noted above for word recognition and silent reading comprehension (see Tables 6-1, 2, 3, 4, and 5) is found for all 5 reading components. By the end of grade 6, all 5 component scores fall below the expected norms. At 4th grade, three of the five fall below (word recognition, word meaning, and spelling).

Table 6-7 presents a comparison of above and below average achievers in each grade on the pretests (grades 2, 4, 6) for five reading components. From Table 6-7 we see that for four of the five components scores, the above average achievers stay above the expected norms, from grades 2 to 6. Above average pupils seem to decelerate on only one component from grade 2 to 4. In grade 2, the above average achievers tested above the norms on word meaning. By 4, the mean scores were -.6 below the expected norm and by grade 6, -2.3 grades below.

Table 6-7

Pretest

Mean Subtest Scores Compared to Expected Norms, With Above and Below Average Breakdown

	Above Average			Below Average		
	Expected Norm	Mean Score	Difference from Expected Norm	Expected Norm	Mean Score	Difference from Expected Norm
Word Recognition						
Grade 2	2.8	2.7	-.1	2.8	2.7	-.1
4	4.8	5.1	+.3	4.8	3.8	-1.0
6	6.8	7.0	+.2	6.8	5.2	-1.6
Oral Reading						
Grade 2	2.8	3.4	+.6	2.8	3.5	+.7
4	4.8	5.7	+.9	4.8	3.7	-1.1
6	6.8	7.4	+.6	6.8	6.0	-.8
Silent Reading						
Grade 2	2.8	2.8	+0	2.8	2.9	+.1
4	4.8	6.0	+1.2	4.8	4.8	+0
6	6.8	7.3	+.5	6.8	5.9	-.9
Word Meaning						
Grade 2	2.8	3.2	+.4	2.8	3.0	+.2
4	4.8	4.2	-.6	4.8	4.4	-.4
6	6.8	4.5	-2.3	6.8	4.3	-2.5
Spelling						
Grade 2	2.8	2.6	-.2	2.8	3.1	+.3
4	4.8	5.4	+.6	4.8	3.4	-1.4
6	6.8	7.3	+.5	6.8	5.0	-1.8

The below average achievers tended to decelerate on all of the five reading components; at grade 4 they had begun to decelerate on four of the tests, all but oral reading. The largest decline was in word meaning (as it was for the above average students). The below average pupils were lowest on the word meaning test, with a difference of 2.5 years from the expected norm. On the other components, there appeared to be a steady deceleration beginning at grade 4 and continuing in grade 6.

Thus, the above average students seem to start decelerating later, if they decelerated at all, while the below average achievers start decelerating, early, usually by grade 4. It would seem as if on only one component, word meaning, did above average readers decelerate as early as grade 4, and continuing this downward trend, to test 2.3 years below the norm on word meaning in grade 6.

The above-average achievers tend to score above the expected norms from grades 2 to 7. They start above the norm on most tests in grade 2 and continue to score above the norms in grades 4 and 6 on four of the 5 tests. The exception is on the word meaning test where they start six months above the norm in grade 2 but are 6 months below in grade 4, and over two years below the norm in grade 6.

It would seem, therefore, that deceleration in reading development is more common (earlier) among the below average achievers in our population of low SES children than among those who achieve above the average. This will be considered in further chapters, especially those relating the home and school factors to the issue of deceleration. Of particular interest is the similarity in the development of word meanings for above and below average children, while other components differ considerably. We will also consider, at a later point, the possible influence of the differential compositions of above and below average students in the different grades on the trends of development for the cross sectional and longitudinal comparisons. In should be noted here, however, that the trends from the gain scores for the same pupils in each grade tended to be similar to those obtained from cross sectional comparisons.

In summary, the low achievers tend to score at a decreasing rate of growth from grade 2 to 6. In grade 2, their scores are on a level expected by the average child at the time -- i.e., on norm. The deviation from the norm grows rapidly in Grade 4 and is largest in Grade 6, with deviations from the norm on all 5 tests.

Post Test Data

To test whether the deceleration trend was maintained on the posttests, a year later, we analyzed the mean posttest scores on the five components when these students were in grades 3, 5, and 7. The results are presented in Table 6-8.

From Table 6-8, we find the same general trends as for grades 2, 4 and 6 (Table 6-6). Overall, there is a similar deceleration in the successive grades, as best seen from the "deviation from the norms" column. From it we find that on three of the components -- oral reading, word meaning, and spelling - there is a consistent increase in deviation from expected norms. For two others -- word recognition and silent reading -- there is a slight increase in the deviation from grade 3 to 5, but it is followed by a decrease from grade 5 to 7.

Thus it would appear that for all of the subtests, our sample of

Table 6-8

By Grade: Mean Scores and their Deviation from the Norm on 5 Reading Components on Posttest Data

	Grade 3		Grade 5		Grade 7	
	Mean Score	Deviation From Norm	Mean Score	Deviation From Norm	Mean Score	Deviation From Norm
Word Recognition	4.3	+.5	6.9	+1.1	7.3	-.5
Oral Reading	5.2	+1.4	6.8	+1.0	8.1	+.3
Silent Reading	4.8	+1.0	7.0	+1.2	7.1	-.7
Word Meaning	3.9	+.1	4.8	-1.0	5.0	-2.8
Spelling	3.7	-.1	5.5	-.3	6.7	-1.1

children in grade 7 are most "behind" the 7th grade norms of the test. On only oral reading are they still above the test norms for grade 7.

Overall, as compared to the pretest scores, the trends for the posttests are similar, but they seem to decelerate later than on the pretests. Thus, on most of the pretest scores deceleration began from grade 2 to 4 on most of the reading components. On the posttests, the tendency for most of the components was to decelerate from grade 5 to grade 7.

Table 6-9 presents the mean scores by above and below average students, with deviations from the expected norms for grades 3, 5 and 7, for the five reading components.

Table 6-9 tends to confirm the results reported earlier for the pretests on grades 2, 4 and 6. The posttest scores for the same children, a year later, tend to show that deceleration with succeeding grades is more characteristic for the below average achievers than for the above average. If one looks at the below average achievers' scores from grades 3 to 7, one finds an increasing negative deviation from the norms. It appears to start on most of the subtests with grade 5, and picks up a momentum of decline in grade 7.

The above average achievers do not decline for four of the five components even by grade 7. Indeed, they seem to gain more than lose from grade 3 to 5. Overall, as for the pretest scores (2, 4, 6) the posttest scores (3, 5, and 7) decelerate little for the above average readers while the low achievers decelerate considerably.

Table 6-9

Above/Below Average Groups: Mean Scores and Deviations from the Expected Norms on Posttest Measures

	Grade 3				Grade 5				Grade 7			
	Above Average		Below Average		Above Average		Below Average		Above Average		Below Average	
	Mean Scores	Deviation from Norm (3.8)	Mean Scores	Deviation from Norm (3.8)	Mean Scores	Deviation from Norm (5.8)	Mean Scores	Deviation from Norm (5.8)	Mean Scores	Deviation from Norm (7.8)	Mean Scores	Deviation from Norm (7.8)
Word Recognition	4.2	(+.4)	4.3	(+.5)	7.8	+2.0	5.7	-.1	8.6	+.8	6.0	-1.8
Oral Reading	5.5	(+1.7)	5.0	(+1.2)	7.9	+2.1	5.2	-.6	9.4	+1.6	6.9	-.9
Silent Reading	4.5	(+.7)	4.9	(+1.1)	8.0	+2.2	5.6	-.2	8.0	+.2	6.3	-1.5
Word Meaning	4.1	(+.3)	3.9	(+.1)	4.8	-1.0	4.8	-1.0	5.1	-2.7	5.0	-2.8
Spelling	3.7	(-.1)	3.7	(-.1)	6.1	+.3	4.6	-1.2	8.0	+.2	5.4	-2.4

Table 6-10 presents the pre- and posttest gains. These are longitudinal data and although the time span is only one year, it offers an opportunity to make additional observations on the course of growth in the five reading components. We present in Table 6-10 the mean score gains for all pupils in each of the grades.

Table 6-10

Pre/Post Mean Scores Gains by Grade in Relation to Expected Norms For 5 Reading Components

	Grade 2	Grade 3	2/3 Gain	Grade 4	Grade 5	4/5 Gain	Grade 6	Grade 7	6/7 Gain
Word Recognition	at/slightly below norm	1/2 year above norm	+1.6	1/3 year below norm	1 year above norm	+2.4	3/4 year below norm	1/2 year below norm	+1.2
Oral Reading	3/4 year above norm	1-1/2 years above norm	+1.7	at/slightly above norm	1 year above norm	+1.9	at/slightly below norm	1/3 year above norm	+1.4
Silent Reading	at/slightly above norm	1 year above norm	+1.9	3/4 year above norm	1-1/5 year above norm	+1.5	1/5 year below norm	3/4 year below norm	+.5
Word Meaning	1/3 year above norm	at/slightly above norm	+.8	1/2 year below norm	1 year below norm	+.5	2-1/2 year below norm	2-4/5 year below norm	+.6
Spelling	at/slightly above norm	at/slightly below norm	+.8	1/5 year below norm	1/3 year below norm	+.9	3/4 year below norm	1 year below norm	+.6
	Mean Gain 1.4			Mean Gain 1.4			Mean Gain .9		

Table 6-10 shows a trend, although it is somewhat weaker than the trend from the cross sectional data. When we average the gains on the separate components for each grade, we find a mean gain of 1.4 from grades 2 to 3, 1.4 from grade 4 to 5, and .9 from grade 6 to 7.

Table 6-11 presents the longitudinal gains by above and below average pupils. Generally, the longitudinal data, as presented in Table 6-11, indicate that the below average pupils decelerate earlier and to a greater extent than the above average pupils. The above average pupils seem also to decelerate later between 6th and 7th grades.

From Table 6-11 we note also that when the posttest gains of the above average pupils are analyzed by grade, they tend to accelerate rather than decelerate for three of the components -- word recognition, oral reading, and word meaning. There is some tendency for the gains to decelerate for the above average for two of the components -- silent reading and spelling. Silent reading decelerates from grade 6 to 7, and spelling seems to start decelerating earlier, from 4 to 5.

The picture is different for the below average achievers, where on 4 of the 5 tests -- word recognition, oral reading, silent reading and spelling -- there seems to be a definite deceleration of gains which begins at about grades 4 to 5 or 6 to 7 and is most prominent at grade 7. Even word meaning gains, although not consistent, show a deceleration from grade 2-3 to 6-7.

Table 6-11

Above and Below
Pre and Post Test Mean Scores for Average Groups in Relation to Expected
Norms for Five Roswell-Chall Subtests--and--Pre/Post Gains

	Grade 2	Grade 3	2/3 Gain	Grade 4	Grade 5	4/5 Gain	Grade 6	Grade 7	6/7 Gain
Word Recognition									
above average	at/slightly below norm	1/2 year above norm	+1.5	1/3 year above norm	2 year above norm	+2.7	1/5 year above norm	3/4 year above norm	+1.6
below average	at/slightly below norm	1/2 year above norm	+1.6	1 year below norm	at/slightly below norm	+1.9	1-3/5 year below norm	1-3/4 year below norm	+.8
Oral Reading									
above average	3/5 year above norm	1-3/4 year above norm	+2.1	1 year above norm	2 years above norm	+2.2	2/3 year above norm	1-3/5 year above norm	+2.0
below average	3/4 year above norm	1-1/3 year above norm	+1.5	1 year below norm	3/5 year below norm	+1.5	4/5 year below norm	1 year below norm	+.9
Silent Reading									
above average	at norm	3/4 year above norm	+1.7	1-1/5 year above norm	2-1/5 year above norm	+2.0	1/2 year above norm	1/5 year above norm	+.7
below average	at/slightly above norm	1 year above norm	+2.0	at norm	1/5 year below norm	+.8	1 year below norm	1-1/2 year below norm	+.4
Word Meaning									
above average	2/5 year above norm	1/3 year above norm	+.9	3/5 year below norm	1 year below norm	+.6	2-1/3 year below norm	2-3/4 year below norm	+.6
below average	1/5 year above norm	at/slightly above norm	+.9	1/2 year below norm	1 year below norm	+.4	2-1/2 year below norm	2-3/4 year below norm	+.7
Spelling									
above average	1/5 year below norm	at/slightly below norm	+1.1	3/5 year above norm	1/3 year above norm	+.7	1/2 year above norm	1/5 year above norm	+.7
below average	1/3 year above norm	at/slightly below norm	+.6	1-2/5 year below norm	1-1/5 year below norm	+1.2	1-4/5 year below norm	2-1/2 years below norm	+.4

Mean gain for above average 1.5
Mean gain for below average 1.3

Mean gain for above average 1.6
Mean gain for below average 1.2

Mean gain for above average 1.1
Mean gain for below average .6

The trend for the word meaning gains of the below average is similar to that of the above average. There is not a clear deceleration, but the scores are consistently below the expected norms at each of the succeeding grades, after grade 2.

For our population, then, it appears that those pupils whose reading achievement in previous grades was above average, (those who tested on stanines 5 and 6) did not tend to experience deceleration as much as those who tested below average in reading. Thus, the below average achievers start to decelerate earlier and more consistently as compared to the total group, and to the above average for each grade.

The analyses reported above (Tables 6-6 to 6-11) suggest, also, differences in patterns of growth and deceleration for the different reading components. At the end of grade 2, there was little difference in mean scores on the five components. All grade groups were "on level," i.e. on grade norms or above.

The earliest and most intense deceleration for total grade groups was found on the word meaning component. The scores on word meaning decelerated progressively from grades 4 to 7. At grade 2 the word meaning scores averaged .4 year above the norm. At grades 6 and 7, the mean scores on word meaning were more than two grades below the expected norms -- the lowest scores as compared to the other components.

The two components that seem to have similar rates of deceleration -- that are milder when compared to word meaning -- are spelling and word recognition. Both have expected norms in grade 2, below expected norms on the grade 4 and beyond. By grade 6 they average -.6 and -.9 grades below expected norms, respectively.

The mildest decelerations were found for the oral and silent reading comprehension tests. On both tests the scores in grade 2 were on or above the expected norms. On both, the actual scores were higher in relation to expected norms in grade 4. Deceleration for the total groups is found first in grade 6, with relatively low decelerations -- -.2 of a grade for oral reading and -.4 for silent reading when compared to expected norms.

The above generalizations about the patterns of growth and deceleration on the different reading components are based on the total populations in each grade. When the above and below average pupils are separated for each grade, the patterns of development differ. As noted, the below average readers tend to begin to decelerate earlier, and with greater intensity than the above average on most of the reading components. The above average readers seem to decelerate little even through grade 7.

Word meaning is the only component on which the above and below average pupils resemble each other. Both start with a .4 grade above the expected norms in grade 2, and they drop to -.5 of a grade below the norm in grade 4. By grade 6, both the above and below average pupils average about -2 1/2 years below the norms by grade 6.

From the growth and deceleration patterns of the 5 reading components, with a consideration of the pattern of the above and below average achievers, the following issues are raised. We will raise them, here, with some introductory discussion. A fuller discussion will be presented in the chapter conclusions and implications, following the additional analyses in intercorrelations of component scores, the factor analyses, and the like.

There seem to be differences in patterns of growth and deceleration for the different reading and reading-related components. The differentiation by degree of intensity and start of deceleration appears as follows: word meaning - earliest start and most intense deceleration; spelling and word recognition - middle intensity and later start of deceleration; oral and silent reading - latest start and least intensive deceleration. The similarity in word meaning scores between the above and below average readers suggests that SES or home patterns may be the major factor in its early development.

As will be seen later in the correlation analyses, word meaning scores are not significantly related to the various reading components -- at least not till grade 7. This can be understood when it is noted that the hard, abstract words tested on the higher grades on the word meaning test (and on the WISC) are not used to any great extent by the reading and other textbooks before about a grade 7 or 8. Thus word meaning may become a growing force for reaching development, beyond the end date of grade 7 for this study.

The spelling and word recognition scores also decelerate, somewhat later and somewhat less intensively than the word meaning scores. This can be explained by their sharing with each other and with the word meaning test the characteristics of precision and decontextualization. All three require accuracy with recognizing, reproducing, and defining words of increasing difficulty and without a familiar context.

The two components that decelerate least for our population are both contextual -- oral and silent reading comprehension. The oral reading test requires accuracy in recognizing words with connected text, and the silent reading focuses on reading for comprehension. Both however, share the characteristic of reading of contextual materials.

Thus, the components with most intensive and early deceleration tend to be the most decontextualized as compared to most contextualized.

They can also be viewed in terms of the relative influence from the home or school. Those components depending mainly on the home (early word meaning) show earlier and more intensive deceleration. (This will be discussed further in Chapters 8 and 9.)

Finally, perhaps of greatest importance, is the finding that earlier and more intensive decelerations are characteristic of the below average readers, on most of the five components. The above average reader decelerates later and less intensively, although all are at low SES backgrounds.

Correlational Analyses

The third analysis covers the intercorrelations of the various reading components. Which of the components are highly associated with each other? Which are not? Which components seem to effect the growth of other components? Which pretest components predict best the scores on the posttests? Do the intercorrelations among the components differ at different grades?

We attempted to answer these questions with two kinds of data:

First, we reviewed the tables and charts presented earlier for evidence as to which components influence which, and at what grades.

Table 12

Mean Scores (By Grade) on Pre and Post Tests Of 6 Reading Components--and--Pre/Post Gains

	Grade 2	Grade 3	2/3 Gain	Grade 4	Grade 5	4/5 Gain	Grade 6	Grade 7	6/7 Gain
Word Recognition	2.7	4.3	+1.6	4.5	6.9	+2.4	6.1	7.3	+1.2
Oral Reading	3.5	5.2	+1.7	4.9	6.8	+1.9	6.7	8.1	+1.4
Silent Reading	2.9	4.8	+1.9	5.5	7.0	+1.5	6.6	7.1*	+ .5
Word Meaning	3.1	3.9	+ .8	4.3	4.8	+ .5	4.4	5.0	+ .6
Spelling	2.9	3.7	+ .8	4.6	5.5	+ .9	6.1	6.7	+ .6
Phonics*	9.9	11.5	+1.6	11.5	11.8	+ .3	11.6	12.0*	+ .4

*=ceilings effects for some of the more advanced pupils

Table 6-12 reveals some differing patterns of development and gains. The highest and most consistent gains for the pupils -- from grades 2 to 3, 4 to 5, and 6 to 7 -- are on the word recognition and oral reading components. The gains on both of these components at all retest points, are above the expected one year gain. The gains from grade 6 to 7 for word recognition and oral reading are lower than for the previous grades, but they are still above tested norms. Silent reading patterns are about the same as word recognition and oral reading for grades 2 to 3 and 3 to 4. However, for grades 6 to 7, there appears to be a sharp decrease from 1 1/2 year gain from grade 4 to 5, to 1/2 year gain from grade 6 to 7.

The word meaning and spelling gains seem to decelerate earliest and most intensively with the gains from grade 2 to 3, 4 to 5, and 6 to 7 being at levels below the 1 year expected.

The phonics scores were not analyzed the same way as the 5 components, for it was not criterion scored. The phonics scoring covers only fundamental phonics -- to about a 4th grade level. Each section was given a score of 1, with a possible score of 12. It is of interest that this perfect score was reached by all 7th graders, and by most in grade 2, and even by the below average readers by 3rd grade.

Table 6-13 presents the pre- and posttest scores, by components, and by above and below average readers for each grade, and the pre/posttest gains.

Overall, the table shows the above average readers scoring higher in relation to the below average readers in each succeeding grade, except

Second, we analyzed the interrelations for the various reading and reading-related components by grade, and for pre- and posttests.

Third, we factor analyzed the reading scores.

Table 6-12 compares the pre-and posttest mean scores and gains for the 5 previously discussed components plus phonics at all grades tested -- grade 2 to 7. The table is particularly useful for studying relationships between the different reading and language components.

Table 6-13

Mean Scores (By Above and Below Average Groups) on Pre-and Post Tests

Of 6 Reading and Language Components--and--Pre/Post Gains

	Grade 2	Grade 3	2/3 Gain	Grade 4	Grade 5	4/5 Gain	Grade 6	Grade 7	6/7 Gain
rd Recognition									
above average	2.7	4.2	+1.5	5.1	7.8	+2.7	7.0	8.6	+1.6
below average	2.7	4.3	+1.6	3.8	5.7	+1.9	5.2	6.0	+ .8
al Reading									
above average	3.4	5.5	+2.1	5.7	7.9	+2.2	7.4	9.4	+2.0
below average	3.5	5.0	+1.5	3.7	5.2	+1.5	6.0	6.9	+ .9
lent Reading									
above average	2.8	4.5	+1.7	6.0	8.0	+2.0	7.3*	8.0*	+ .7*
below average	2.9	4.9	+2.0	4.8	5.6	+ .8	5.9	6.3	+ .4
rd Meaning									
above average	3.2	4.1	+ .9	4.2	4.8	+ .6	4.5	5.1	+ .6
below average	3.0	3.9	+ .9	4.4	4.8	+ .4	4.3	5.0	- .7
elling									
above average	2.6	3.7	+1.1	5.4	6.1	+ .7	7.3	8.0	+ .7
below average	3.1	3.7	+ .6	3.4	4.6	+1.2	5.0	5.4	+ .4
onics *									
above average	10.0	11.5	+1.5	12.0	12.0	0	12.0	12.0	0
below average	9.8	11.5	+1.7	10.8	11.6	+ .8	11.3	12.0	+ .7

*=ceiling effects for some of the more advanced pupils

for the scores on word meaning where the above and below average tend to score about the same in grades 2 through grade 7. Thus, on word recognition, the differences between the mean scores for the above and below average students are slight at grades 2 and 3. At grades 4 and 5, the differences are substantial, with a 1.3 grade difference in grade 4 between the above and below average readers, and a difference of 2.1 at Grade 5. At grades 6 and 7, the differences continue to be considerable with a 1.8 difference at grade 6 and a 2.6 at grade 7.

The difference in average yearly gains in word recognition (from grade 2 to 3; 4 to 5; and 6 to 7) also increase between the above and below average readers.

The oral reading scores for the above and below average readers as well as the differential yearly gains also grow farther apart. In the 2nd and 3rd grades, the above and below average students scores are similar -- and their gains from the 2nd and 3rd are also very different. There is a general increase however, in the differences between the above and below average readers in the 4th and 5th grades, and in their gains. The greatest discrepancies between the above and below average readers fall in the 6th and 7th grades, with the exception of silent reading, where about one-half of the above average students achieved the maximum score.

Correlations Among the Reading Components

Table 6-14 presents a summary of the intercorrelations among the 6 reading components.

The table is to be read as follows:

Correlations of mean word recognition scores with oral reading. were significantly positive in 7 out of the 9 intercorrelations (+7/9). Word recognition with word meaning were not positively correlated on any of the 9 intercorrelations, etc.

TABLE 6-14

Correlations Among Reading Components Across Grades and for Pre-Pre, Post/Post, and Pre/Post Tests

word recognition/oral reading	+7/9
word recognition/word meaning	+0/9
word recognition/silent reading	+4/9
word recognition/spelling	+4/7
word recognition/phonics (pretest)	+6/9
oral reading/word meaning	+3/9
oral reading/silent reading	+5/9
oral reading/spelling	+7/9
oral reading/phonics (pretest)	+7/9
word meaning/silent reading	
word meaning/spelling	+0/9
word meaning/phonics (pretest)	+5/9
silent reading/spelling	+5/9
silent reading/phonics (pretest)	+7/9
spelling/phonics (pretest)	+8/9

If we consider as high those intercorrelations with a total of 6 or more out of 9 positively related, it would appear that the 6 high correlations fall into the following categories:

First are the 5 tests with both aspects of word recognition and analysis, e.g. word recognition and oral reading (7/9), word recognition and phonics (6/9), oral.reading and spelling (7/9), oral reading and phonics and spelling and phonics (8/9). Only one of the high intercorrelations, silent reading and phonics, contains only one test related to word analysis.

The components having the fewest significant positive intercorrelations were those related to word meaning and silent reading comprehension.

e.g.

WR/WM	+0/9	WR/SR	+4/9
Oral/WM	+3/9	WM/Phonics	+5/9
WM/SP	+0/9	SR/SP	+5/9
Oral/SR	+5/9		

The above intercorrelations suggest that word meaning had the lowest relationship with word recognition and tests highly related to it, spelling, phonics, and oral reading.

From our various analyses, it appears that phonics, word recognition, oral reading, and spelling in grades 2, 3 and 4 are strong predictors of progress in the later grades. These 4 components are also helpful at the higher grades for the "precision" necessary for reading at grades 6 and 7.

Scores on the word meaning test do not seem to predict most reading scores until about grade 7. At this grade, the positive correlation of word meaning and silent reading is significant on 3 out of 4 measures.

For predicting scores on other components at the same grade, and on the posttests a year later, are the tests most highly related to word recognition -- word recognition, oral reading, spelling, and phonics. Silent reading comprehension also falls within this category, looking much like oral reading, particularly in the lower grades, where it depends considerably on the ability to read connected text.

The component that appears to be least predictive of reading development for this population, from grade 2 to 6 is word meaning. Generally, too, the word meaning criterion scores are the lowest of the 6 components. Although in 2nd grade the word meaning scores are at about the norms for the grade, beginning with grade 4 and continuing through grade 7, they are the lowest of all the subtests, about 2 1/2 years below the expected norms. Further they do not seem to be correlated with the other tests, particularly the word recognition and word analysis components. The correlation of word meaning with silent reading comprehension varies. In grades 2 and 4, 2 out of the 4 correlations are positive and significant. At grade 7, 3 out of 4 correlations are significant.

The data suggest, then, that around grade 7, the relation between word meaning and silent reading begins to be positive and significant. It would se therefore, that a greater relationship in the years to follow is to be expected.

Another dimension that seems to be related to the patterns of development and decelerative trends for grades 2 to 7 is the ability to decontextualize words in spoken and written language and to be precise with regard to their meaning and form. The word meaning test can be seen as decontextualizing the meaning of words. The spelling and the word recognition tests can also be viewed as tests of the ability to decontextualize since the words are to be recognized in isolation. Measured by tests of isolated words, these components differ from silent reading comprehension and the oral reading tests, which test reading in context. They also require precision and high accuracy. These three tests -- word meaning, word recognition, and spelling -- decelerate at a high rate in the higher grades than do the oral and silent reading comprehension tests, both of which entail reading of connected text.

Factor Analyses

Several factor analyses were performed on the reading tests. The first was of six subtests, using two types of scores -- the criterion plus and the total scores -- for all the students on the pretests (grades 2, 4, and 6). Additional analyses were performed for the total population on the posttests -- at grades 3, 5, and 7 -- using the two kinds of scores, criterion plus and total number correct. See Table 6-15 for factor loadings from these factor analyses.

From Table 6-15 we note that the results of all four analyses are essentially the same. All indicate one factor, a general reading factor. The various reading subtests loaded very high on the general reading factor, with the exception of word meaning. In contrast to the other reading components, the word meaning test did not require the reading of print. It was a test of the meanings of words presented orally. The responses were given orally as well. It should be noted that while word meaning has a positive loading, it is not as high as the other 5 which depend upon varying kinds of reading of print.

Additional factor analyses were performed for the separate grades. We thought it particularly important to study factors by grades in light of theories of reading development (Chall, 1983) and past research evidence on deceleration of reading achievement scores among low SES children at about 4th-5th grades.

TABLE 6-15

Factor Loadings for Total Sample

	Factor Loadings of Total Pretest Scores for 30		Factor Loadings of Total Posttest Scores for 30	
	Criterion Plus Scores	Total Scores	Criterion Plus Scores	Total Scores
WR	.91	.91	.90	.93
OR	.88	.93	.82	.89
WM	.58	.62	.44	.46
SR	.91	.94	.77	.82
Sp	.83	.82	.89	.87
Ph.	.81	.83	.61*	.60*

*ceiling in effect

Table 6-16 presents the loadings for the pretests at grades 2, 4, and 6, separately for criterion plus and for total scores. From Table 6-16 we note that grade 2 has only one factor -- with loadings that resemble closely those found for the total population (see Table 6-15). Grade 4 has 2 factors on the pretest Criterion Plus scores, but only 1 factor on the total scores. It is interesting to note that the pattern of factor loadings, for grade 4 total scores which have only one factor, is similar to that for grade 2, and the total population (Table 6-15). Again the lowest factor loading is for word meaning.

TABLE 6-16

Factor Analyses of Reading Test Scores Grades 2, 4 and 6

	Criterion		Total Scores	
GRADE 2	F1		F1	
WR	.74		.67	
OR	.88		.85	
WM	.42		.56	
SR	.97		.95	
Sp	.81		.74	
Ph	.79		.85	
GRADE 4	F1	F2	F1	
WR	.65	.50	.93	
OR	.40	.83	.93	
WM	.06	-.66	-.42	
SR	.99	-.07	.74	
Sp	.60	.56	.80	
Ph	.58	.63	.88	
GRADE 6	F1	F2	F1	F2
WR	.39	.76	.38	.77
OR	.45	.77	.58	.77
WM	.99	.05	.94	.07
SR	.83	.25	.88	.20
Sp	-.05	.72	-.05	.72
Ph	.89	.26	.89	.27

The criterion plus scores for grade 4 have two factors (Table 6-16). One of the factors appears to be a combination of silent reading (connected reading with meaning) and various aspects of word recognition, spelling and phonics. The other factor seems to be composed of two parts -- word meaning or precision composed of oral reading, word recognition, spelling and phonics.

On grade 6 pretest, both scorings produced two factors. The results for each scoring are essentially the same. But the results are different from those for grade 4 and 2. For grade 6, pretest, one factor appears to be a meaning factor. Two high loadings on this factor are the word meaning subtest (.99) and the silent reading comprehension test (.83). The high loading (.89) of phonics on this meaning factor is somewhat unexpected. Yet it can be understood when it is realized that words to be understood on the higher levels of the silent reading comprehension tests contain more uncommon words which are unknown in meaning and in identification. Thus ability in phonics at higher levels is positively related to aspects of meaning. The other factor for grade 6 appears to be a word recognition or precision factor, with substantial loadings on word recognition, oral reading, and spelling.

Table 6-17 contains the factor analysis data for the posttests for grade 3 and 5, based on Criterion Plus and on Total Scores. For grade 3, criterion scores, one factor seems to be a word recognition and analysis factor with loading on oral reading (.87), word recognition (.72), spelling (.54) and phonics (.47). The other factor appears to be a word meaning andcomprehension factor -- phonics (.87), silent reading (.69), and word meaning (.68).

Grade 3, Total Score, is similar -- with one factor appearing to be a word recognition factor (oral reading (.99), word recognition (.73), and spelling (.69)). The other a word meaning and comprehension factor -- word meaning (.62), silent reading (.73) and phonics (.83).

Grade 5, criterion plus scores, resemble grade 6, pretest, in the 2 factors found -- one appears to be a word recognition factor, with positive loadings on all components except word meaning. The other factor is a word meaning, silent reading factor, with similar loadings from word meaning and silent reading.

The grade 5 total scores seem to have essentially similar factors as the criterion plus scores. One factor is an accuracy of word recognition factor, with all reading tests with the exception of word meaning loading positively on it. The other factor is a word meaning-reading comprehension factor with highest loadings from word meaning and silent reading comprehension.

TABLE 6-17

	Criterion		Total Scores	
	F1	F2	F1	F2
GRADE 3				
WR	.14	.72	.73	.18
OR	.09	.87	.99	.01
WM	.68	.01	.10	.62
SR	.69	.17	.06	.73
Sp	.45	.54	.69	.34
Ph	.87	.47	.51	.83
GRADE 5				
WR	.81	.58	.85	.50
OR	.71	.16	.75	.18
WM	-.03	-.46	-.10	-.66
SR	.72	-.38	.88	-.46
Sp	.85	.30	.85	.46
Ph	.57	-.01	.54	.08

Summary of Factor Analyses

The factor analyses seem to confirm the trends reported for "developmental" trends, pre/posttest gains, and intercorrelations of the different reading components. Generally, the reading component scores for the lower grades show less distinction. As the grades get higher

(3 and 4), more than one factor is seen. The descriptions of these factors tend to be similar to those found for the previous analyses -- a context reading factor, an accuracy/precision decontextualized factor, and a word meaning/reading comprehension factor.

Chapter 7

Writing and Language

Introduction

This chapter includes findings for the writing samples and language tests (described in Chapter 2) and concludes with an analysis of the interrelationships among the reading, writing, and language of the children studied, and with implications for development.

Part I: Writing

As for reading, we were concerned with the writing development of the pupils in the study--from the lower to higher grades. Since the technology for measuring writing is not as advanced as it is for reading, we tried various measures of assessment and compared these with each other. Two major kinds of measures were made: 1. holistic ratings (and rankings) of overall "maturity" and "goodness" as well as ratings of specific aspects of writing, and 2. counts of internal factors. The different measures are listed in Table 7-1.

Table 7-1
Writing Factors Measured

Ratings and Judgments	Internal Counts
Overall holistic rating (1-4)	Production: number of words
Overall holistic ranking (1-30)	Average T-Unit length
Organization rating (1-3)	Average utterance length
Content rating (1-4)	Number of unfamiliar Spache vocabulary
Form rating (1-4)	Number of unfamiliar Dale vocabulary
Handwriting rating (1-3)	Percent of misspelled words

The results of the writing analyses are presented as follows:

1. cross-sectional data for grades 2, 4, and 6, and for above and below average pupils, for both narration and exposition;
2. cross-sectional data for grades 3, 5, and 7, and for above and below average pupils for both narration and exposition;
3. Longitudinal data for grades 2/3, 4/5, and 6/7 gains;
4. Summary discussion for both narration and exposition;

In some writing features, only the cross-sectional data for grades 3, 5, and 7, on narration is presented.

It should be noted that the sample numbers were not equal, so that the 4/5th grade group had more students than the other grades, overall. It also had a greater number of above average students. It should also be noted that, although each grade's number is quite small, the grades 6/7 is even smaller than the other two. Table 7-2, below, presents the breakdown of the numbers of students for whom pre- and post-test data were available.*

*Table 7-2
Breakdown of Number of Students for Whom Pre- & Posttest Data were Available

	Grades 2/3	Grades 4/5	Grades 6/7
Above Average	4 (40%)	7 (58%)	4 (50%)
Below Average	6 (60%)	5 (42%)	4 (50%)
Total	10	12	8

(Chapter 6 includes additional discussion of grade-group differences.)

We turn, first, to the analyses of the overall ratings: the holistic ratings and holistic rankings.

Holistic Ratings

For both the pretest and the posttest samples, three raters were trained to the range of the papers for both the narrative and the expository stimuli. Then each set of papers was holistically rated on a scale of 1 (representing the least mature paper) to 4 (representing the most mature paper). Despite the small sample, rating sessions were conducted according to the guidelines at the Educational Testing Service (Fowles, 1978).

Grades 2, 4, and 6 (Pretest)

Table 7-3 presents the mean ratings for Grades 2, 4, and 6 on both the narrative and expository samples.

Table 7-3
Mean Holistic Rating
Grades 2, 4, 6

	Grade 2	Grade 4	Grade 6
Narrative	1.2	2.6	2.9
Expository	1.5	2.8	3.4

From Table 7-3, we see that on both the narrative and expository samples, the average rating is successively higher for each higher grade. On both stimuli, the larger relative difference is between grades 2 and 4. There is only a slight increase in grade 6, relative to grade 4 ratings. At each grade, average ratings were higher on the expository sample than on the narrative.

Table 7-4 presents the average ratings for above and below average readers in grades 2, 4, and 6 on both stimuli.

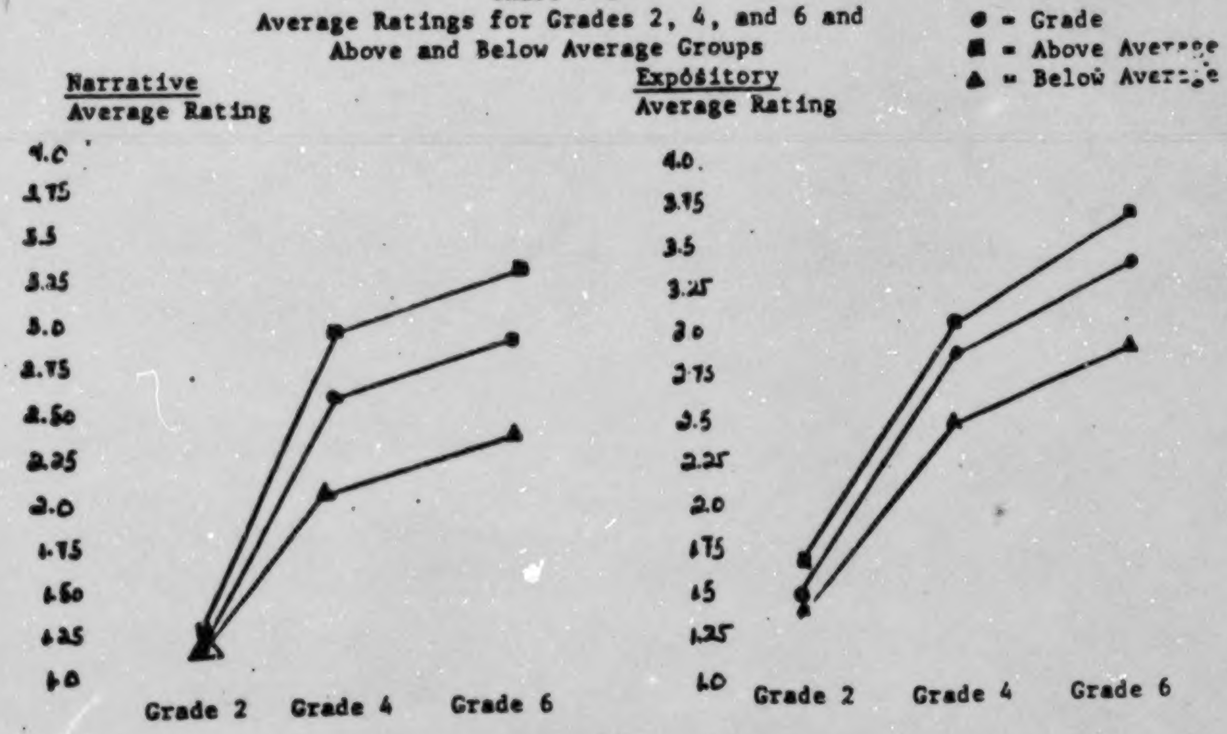
Average Holistic Rating for Above and Below Average Groups
Grades 2, 4, 6

		Grade 2	Grade 4	Grade 6
Narrative	Above Average	1.3	3.0	3.3
	Below Average	1.2	2.1	2.4
Expository	Above Average	1.7	3.1	3.7
	Below Average	1.4	2.5	2.9

In general, above and below average ratings behave like the total grade ratings. On both stimuli, average ratings for the above and below average pupils are successively higher for proceeding grades. For both the above and below average groups, the larger difference is between grades 2 and 4. Like the total grade ratings, both the above and below average pupils received higher ratings on the expository as compared to the narrative sample.

Chart 7-1 graphs the ratings for grades 2, 4, and 6 on both stimuli for total grades and for the above and below average groups. The chart further illustrates the findings reported in Tables 7-3 and 7-4--a greater increase from grade 2 to 4 than from grade 4 to 6.

Chart 7-1
Average Ratings for Grades 2, 4, and 6 and
Above and Below Average Groups



Grades 3, 5, and 7 (posttest)

Table 7-5 presents the average ratings on the retests for grades 3, 5, and 7 (at the end of the second year of the study) on both stimuli.

Table 7-5
Average Holistic Rating Grades 3, 5, 7

	Grade 3	Grade 5	Grade 7
Narrative	1.6	2.7	3.3
Expository	1.5	2.8	3.0

The same trends found in the pretest ratings are found in the posttest ratings. On both the narrative and the expository samples, the average rating is successively higher for each proceeding grade. On both stimuli, the larger difference between grades is found between grades 3 and 5.

Table 7-6 presents the average ratings for above and below average readers on both stimuli.

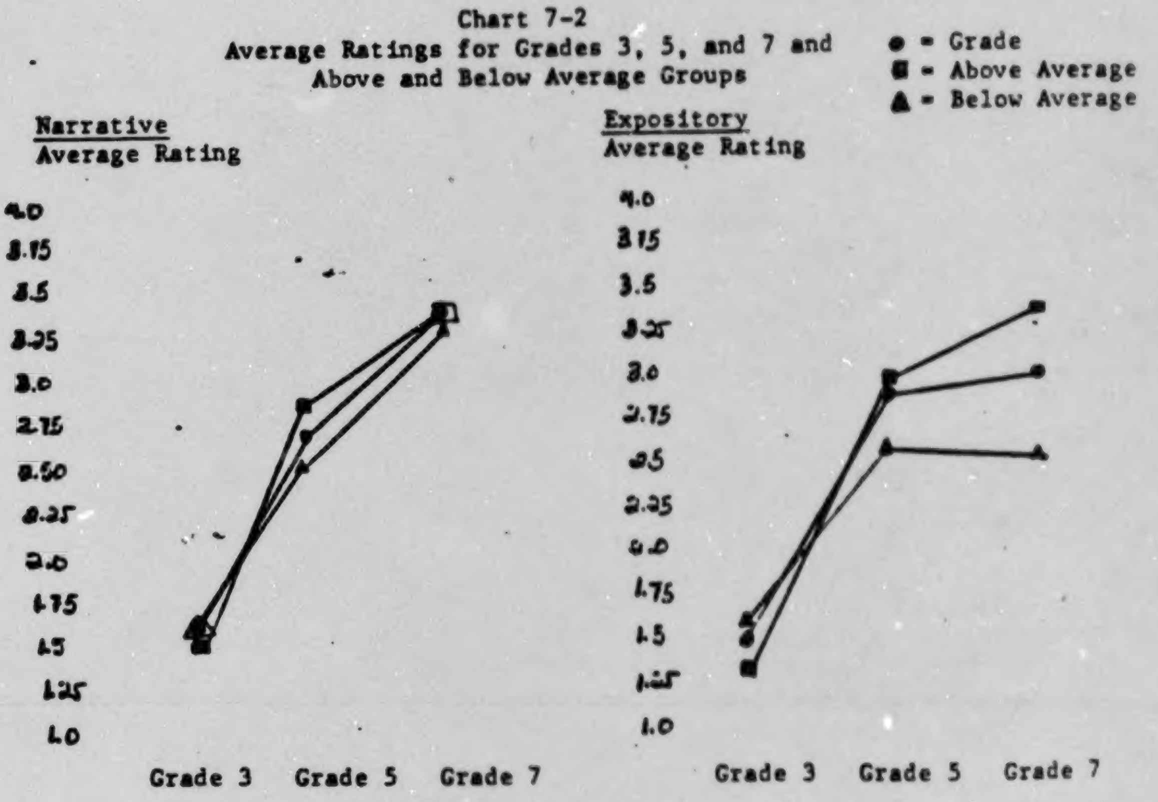
Table 7-6
Average Holistic Rating (1-4) - Above and Below Average Groups
Grades 3,5,7

		Grade 3	Grade 5	Grade 7
Narrative	Above Average	1.5	2.8	3.3
	Below Average	1.6	2.5	3.2
Expository	Above Average	1.3	3.0	3.4
	Below Average	1.6	2.6	2.6

Above and below average trends are similar to those for the total for grades 3, 5, and 7. On both stimuli, ratings for the above and below average pupils are successively higher for each higher grade. Also similar to the total ratings, the larger differences for both the above and below average pupils are between grades 3 and 5; there is a smaller difference between grades 5 and 7. These trends are also seen in the above and below average group pretest ratings.

Chart 7-2 graphs the ratings for grades 3, 5, and 7 on both stimuli for total grades and for the above and below average groups. From the chart we see the trends noted in Tables 7-5 and 7-6.

Chart 7-2
Average Ratings for Grades 3, 5, and 7 and
Above and Below Average Groups



Discussion

The holistic rating trends for total groups at grades 2, 4, and 6 can also be noted in grade 3, 5, and 7 groups: successively higher ratings were given to proceeding grades on both the narrative and expository samples. In addition, the larger differences are found between grades 2 and 4 (as compared to grades 4 and 6) and between grades 3 and 5 (as compared to grades 5 and 7) on both stimuli.

Although the above and below average groups reflect similar trends as those found in their respective wholegrade trends, additional observations can be made. At both grades 2 and 3, above and below average ratings are about the same on both stimuli; indeed, at grade 3, below average ratings are somewhat higher than above average ratings. At grades 4 and 5, on both stimuli, above average ratings are discernibly higher than those for below average pupils. At grades 6 and 7 the above and below average group differences are even larger (relative to the grade 4/5 differences)---except for grade 7 narrative where above and below average ratings are about the same.

Thus, it would seem that on the narrative, while differences in above and below average group ratings occur at grades 4, 5, and 6, there are very small such differences at grades 2, 3, and 7. This suggests that there may have been a "ceiling" on the quality of narrative that the above average students reached by grades 4 and 5 and that the below average students "eventually" reach at grade 7.

On the expository stimulus, above average student writing seems to "level" again at grades 4 and 5. The relative increase that below average students experience at grades 4 and 5 is less than that of the above average pupils. Interestingly, grade 7 below average ratings are lower than grade 6 ratings.

The relative success that below average students experience on narration compared to exposition is generally confirmed in the literature. (see especially Bereiter and Scardemalia, 1982; Perl, 1980). Knowledge of narrative structure (i.e. story grammars) may be used more consciously earlier than knowledge of other genre structures. Earlier familiarity with the purpose, audience, and structure of narration might greatly reduce the constraints of the narrative writing task--especially for the below average pupil who may be experiencing other difficulties. (see, for example, Shaughnessy, 1977).

Holistic Rankings

After papers were holistically rated from 1-4, raters were asked to rank-order them from 1 (representing the lowest quality paper) to 30 (representing the highest quality paper).

Cross-Sectional Trends in Holistic Rankings: Grades 2, 4 and 6 (Pretest)

Table 7-7 presents the average rankings for grades 2, 4, and 6 on both stimuli.

Table 7-7
Average Holistic Ranking for Grades 2,4 & 6

	Grade 2	Grade 4	Grade 6
Narrative	5.5	19.1	21.8
Expository	6.5	17.9	22.7

On both the narrative and expository samples, average rankings are successively higher for each proceeding grade. On both stimuli, the larger relative difference between grades is found between grades 2 and 4. These trends are similar to those for the holistic ratings for grades 2, 4, and 6.

Unlike the trends found in the holistic ratings, where average ratings had been slightly higher for expository, average rankings on narrative and expository were approximately the same.

Table 7-8 presents the average rankings for above and below average readers in grades 2, 4, and 6 on both stimuli.

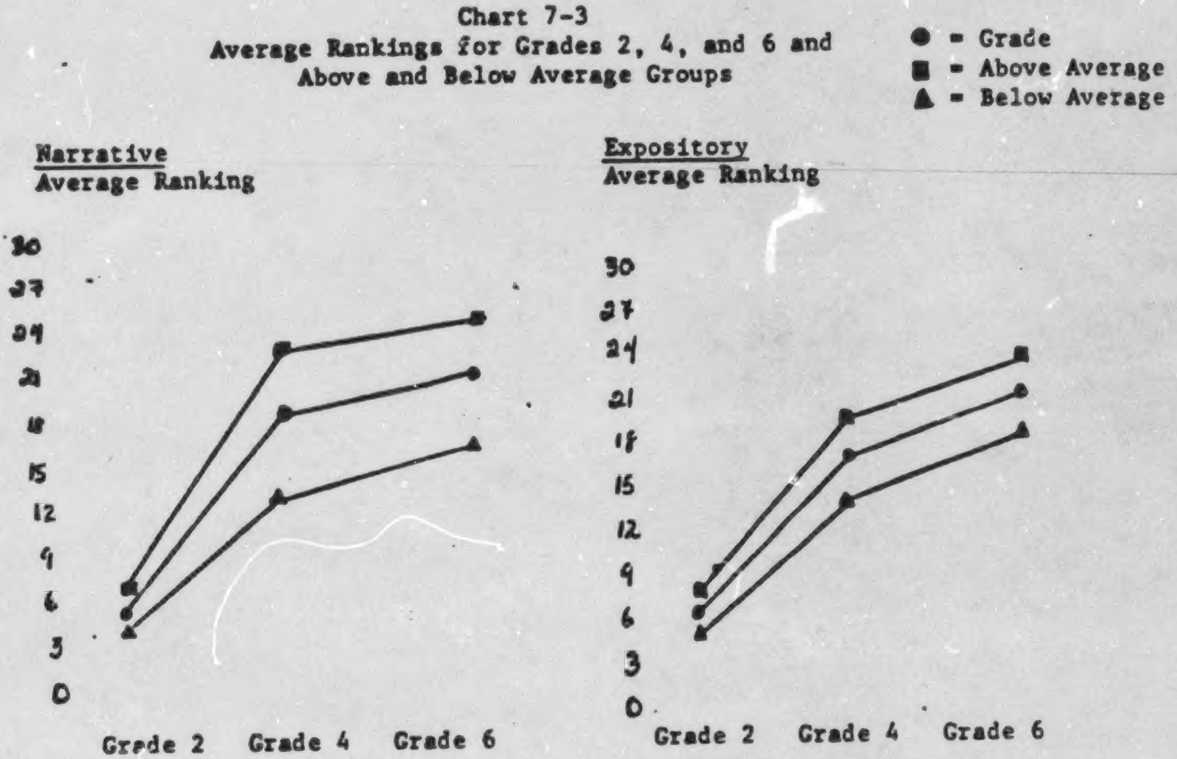
Table 7-8
Average Holistic Ranking for Above and Below Average Groups: Grades 2,4,6

		Grade 2	Grade 4	Grade 6
Narrative	Above Average	7.2	23.1	25.4
	Below Average	4.5	13.6	17.0
Expository	Above Average	8.0	20.3	25.2
	Below Average	5.5	14.1	19.4

Above and below average rankings behave like total grade rankings and like the trends found in the total grade ratings. On both stimuli, average rankings for both the above and below average groups are successively higher for proceeding grades. On both stimuli, the relatively larger difference is found between grades 2 and 4. Differences between grade 4 and 6 are lower. Unlike the ratings for grades 2, 4, and 6, rankings were about the same on narrative as they were on expository for any one group.

Chart 7-3 graphs the rankings on both stimuli for grades 2, 4, and 6 and for the above and below average groups. From the chart we see the trends described in Tables 7-7 and 7-8. We also see clearly that the above average rankings are consistently higher than below average rankings.

Chart 7-3
Average Rankings for Grades 2, 4, and 6 and
Above and Below Average Groups



Grades 3, 5, and 7 (Posttest)

Table 7-9 presents the average rankings for grades 3, 5, and 7 on both stimuli.

Table 7-9
Average Holistic Ranking (1-30) for Grades 3,5, and 7

	Grade 3	Grade 5	Grade 7
Narrative	6.6	19.5	22.0
Expository	6.3	19.4	22.3

Again, as we saw in trends for ratings and for pretest rankings, the average posttest rankings are successively higher for proceeding grades on both stimuli. The difference in average ranking between grades 3 and 5 on both stimuli is considerably larger than the difference between grades 5 and 7. In addition, rankings are virtually the same for the narrative as they are on expository at each grade.

Table 7-10 presents the average rankings for the above and below average groups at grades 3, 5, and 7 on both stimuli.

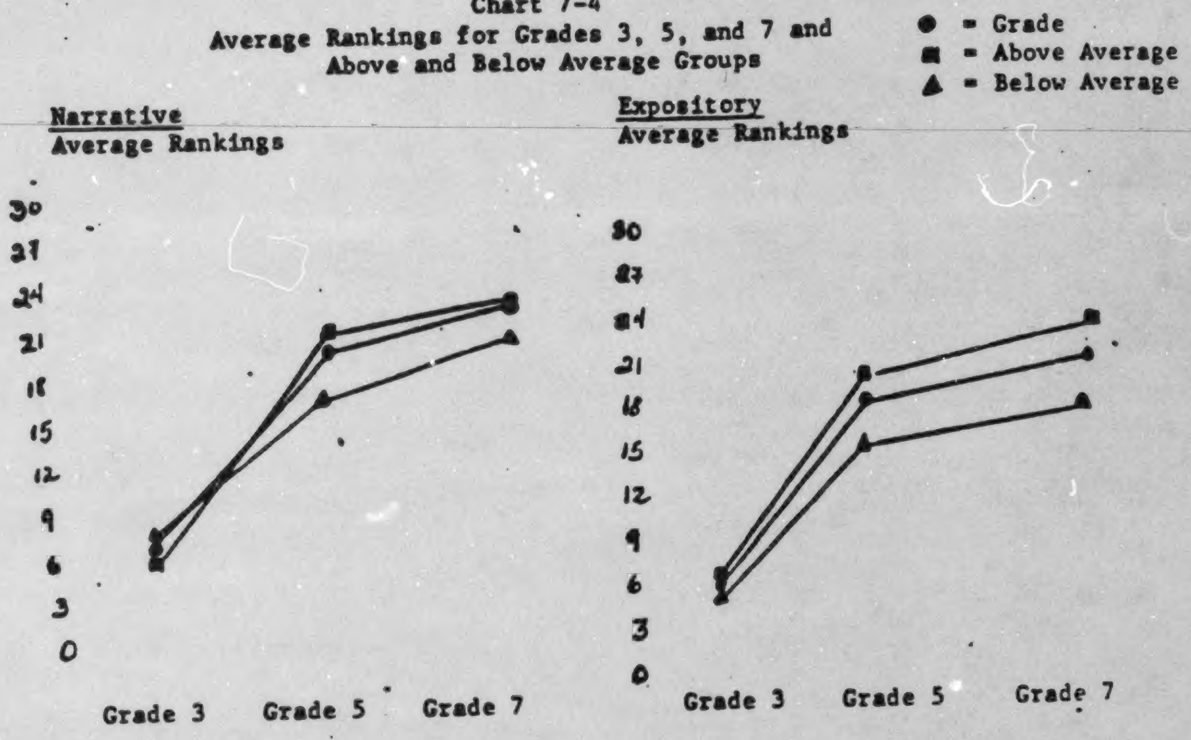
Table 7-10
Average Posttest Holistic Ranking (1-3) for
Grades 3,5 & 7 and Above and Below Average Groups

		Grade 3	Grade 5	Grade 7
Narrative	Above Average	6.2	21.0	22.9
	Below Average	6.8	17.4	20.7
Expository	Above Average	6.6	21.3	24.8
	Below Average	6.1	16.7	18.9

Above and below average rankings behave like the total grade rankings for grades 3, 5, and 7 and like all grade 2, 4, and 6 rankings. That is, average rankings are successively higher for proceeding grades for both above and below average groups on both stimuli. Similar to the pretest rankings, the larger difference between grades is found between grades 3 and 5. The differences between grades 5 and 7 are smaller for both the above and below average groups. Also similar to pretest rankings, posttest rankings were about the same on narrative as they were on expository for any one group.

Chart 7-4 graphs the rankings for grades 3, 5, and 7 on both stimuli for total grades and for the above and below average groups. The chart illustrates the trends reported in tables 7-9 and 7-10.

Chart 7-4
Average Rankings for Grades 3, 5, and 7 and
Above and Below Average Groups



Discussion

The trends in holistic rankings confirm trends found for holistic ratings. Proceeding grades received progressively higher rankings on both the narrative and expository stimuli. In addition, the larger differences are found between grades 2 and 4 (as compared to grades 4 and 6) and between grades 3 and 5 (as compared to grades 5 and 7), on both stimuli.

The trends for the above and below average groups were similar to their whole grade trends. Again there is little difference between above and below average rankings at grades 2 and 3 on either stimulus; both groups averaged ranks below 10 on both stimuli. At grades 4 and 5, on both stimuli, differences in above and below average rankings can be observed with above average students receiving higher rankings (20-23) than below average students (13-17). At grades 6 and 7, on both stimuli, above average pupils still receive higher rankings (22-25) than the below average pupils (17-20). But, interestingly, while 6th grade above and below average group differences are generally maintained (relative to grade 4) 7th grade group differences fluctuate. On narrative, 7th grade above and below average differences are much less (relative to grade 5); and on expository, 7th grade above and below average differences are much greater (relative to grade 5).

Thus, as we noted for the holistic ratings, it would seem that there are small above and below average differences in narrative rankings at grades 2, 3, and 7. On expository, above and below average groups show differences at grades 4 and 5 that are "maintained" or "increased" in subsequent grades.

This reconfirms the observation made on the holistic ratings that below average pupils experienced relative success in narration and lack of success in exposition--relative to their above average counterparts.

Production (The number of words written in 10 minutes)

Cross-Sectional Trends in Production - Grades 2, 4, 6 (Pretest)

Table 7-11 presents the mean number of words produced by grades 2, 4, and 6 in response to each stimulus.

Table 7-11

Mean Number of Words for Grades 2,4 and 6

	Grade 2	Grade 4	Grade 6
Narrative	23.3	69.2	45.8
Expository	24.4	64.6	50.6

On both stimuli, the 4th graders produced the most words--about 2-1/2 - 3 times that of the 2nd graders. Sixth graders produced about 1/3 fewer words than did 4th graders. Thus production increased greatly between grades 2 and 4 and showed a relative decrease between grades 4 and 6. It should be remembered that the 4th grade group had more above average readers and therefore might be slightly "better at writing" as well. In addition, at each grade, students wrote about the same number of words on expository as they did on the narrative writing sample.

Table 7-12 presents the mean number of words produced by above and below average students in grades 2, 4, and 6 on each stimulus.

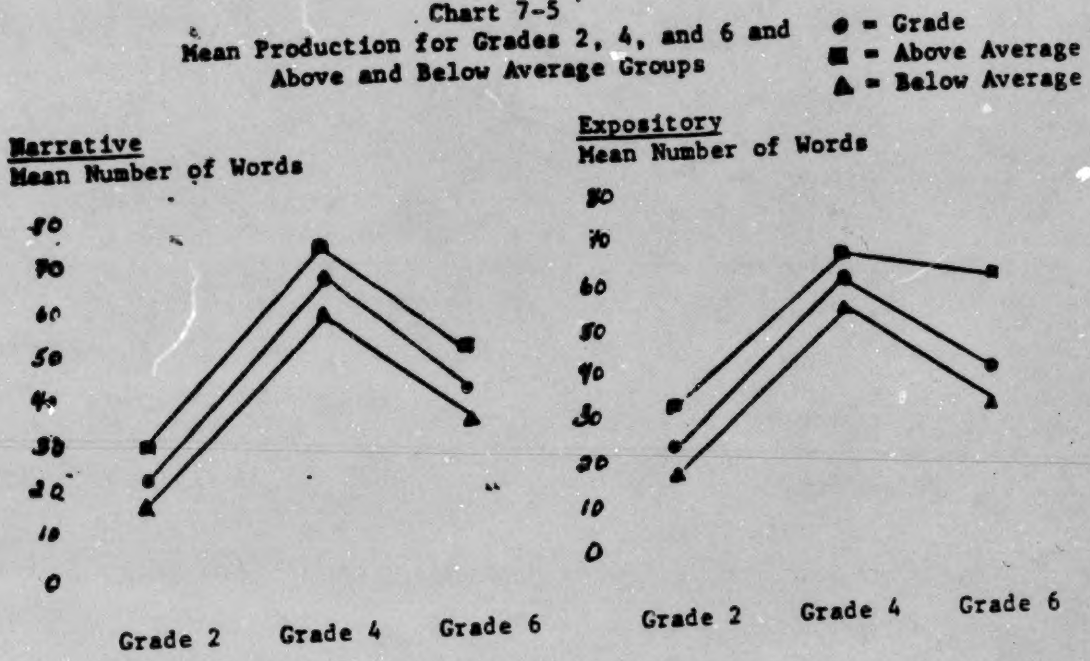
Table 7-12
Mean Number of Words for Above and Below Average Groups
Grades 2,4 and 6

		Grade 2	Grade 4	Grade 6
Narrative	Above Average	30.3	75.7	54.0
	Below Average	18.7	60.0	37.5
Expository	Above Average	31.8	69.7	66.0
	Below Average	19.5	57.7	35.3

The trends noted above for the total grades is reflected in most of the breakdowns of above and below average pupils. On the narrative, both the above and the below average groups showed a great increase in production between grades 2 and 4 and then a relative decrease between grades 4 and 6. This trend is also found for the below average students on the expository. However, the expository trend is somewhat different for the above average group. At grade 6, above average production is about the same as that of the 4th graders.

Chart 7-5 graphs the average production on both stimuli for grades 2, 4, and 6 and for above and below average groups. From the chart, we see the trends described in Tables 7-11 and 7-12. We see clearly that above average students produce more than below average students especially at Grade 4 on expository. We also note how the production trends resemble the rating and ranking trends.

Chart 7-5
Mean Production for Grades 2, 4, and 6 and
Above and Below Average Groups



Grades 3, 5, and 7 (Posttest)

Table 7-13 presents the mean number of words produced by grades 3, 5, and 7 on both stimuli.

Table 7-13
Mean Number of Words for Grades 3,5, and 7

	Grade 3	Grade 5	Grade 7
Narrative	40.1	86.9	80.6
Expository	43.5	94.3	84.9

On both stimuli, the 5th grade group produced the most words. 7th grade students produced slightly less than did 5th grade students. This trend is not unlike the trend found in the pretest data and in ratings and rankings for grades 2, 4, and 6.

Table 7-14 presents the mean number of words produced by above and below average groups in grades 3, 5, and 7 on both stimuli.

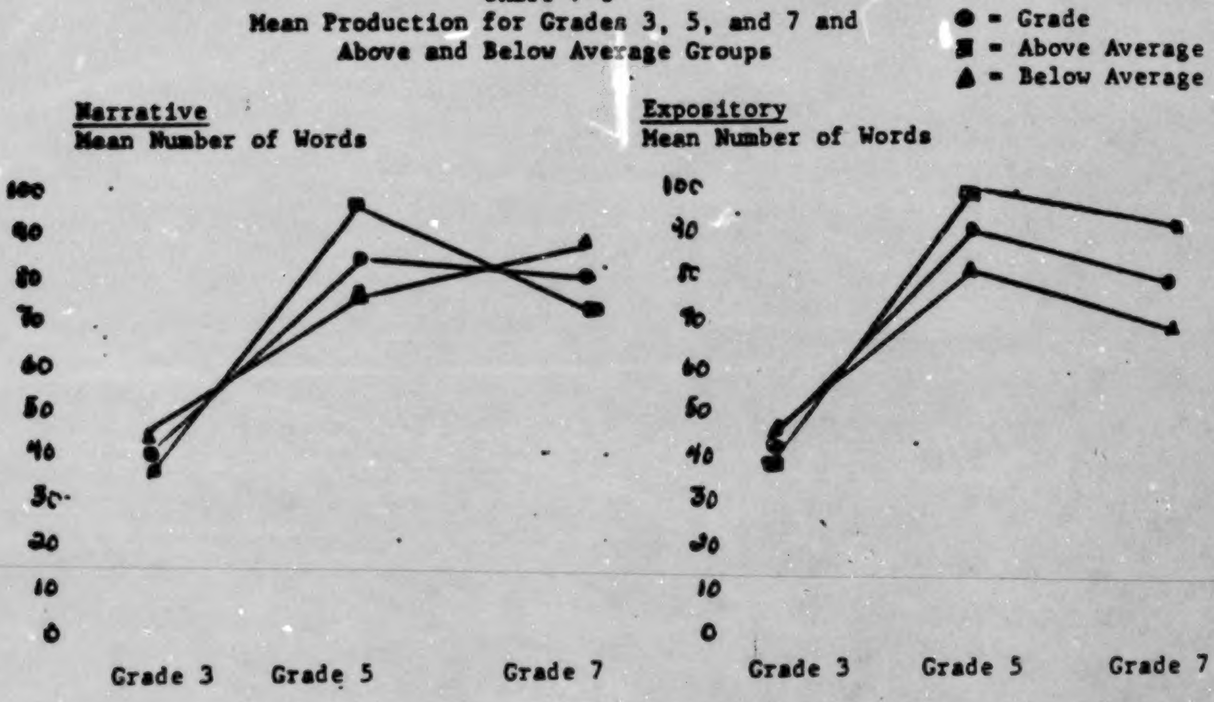
Table 7-14
Mean Number of Words for Above and Below Average Groups:
Grades 3,5 & 7

		Grade 3	Grade 5	Grade 7
Narrative	Above Average	37.5	95.9	73.3
	Below Average	41.8	74.4	88.0
Expository	Above Average	39.5	102.0	96.8
	Below Average	46.2	83.4	73.0

Again, trends noted for total grades are reflected in most of the above and below average group breakdowns. On the expository, both the above and below average groups show considerably higher production at grade 5 (compared to grade 3) and lower production at grade 7 (compared to grade 5). This trend is also found for the above average group on narration. However, the below average group tends to show a different trend on narration. They still produce much more in Grade 5 (compared to grade 3), but they also produce more--not less--in grade 7 (compared to grade 5).

Chart 7-6 graphs the average production on both stimuli for grades 3, 5, and 7 and for above and below average groups. From this chart we see the trends described in Tables 7-13 and 7-14. We see that above average students produce more than below average students in grades 5 and 7 on exposition. But on narration, above average students produce more words in grade 5, and below average students produce more words in grade 7.

Chart 7-6
Mean Production for Grades 3, 5, and 7 and
Above and Below Average Groups



Pre/Post Gains in Production

Table 7-15 presents a summary of the pre/post gains for grades 2/3, 4/5, and 6/7 on both stimuli.

Table 7-15
Pre/Post Gains (By Grades) in Production

	Grades 2/3	Grades 4/5	Grades 6/7
Narrative	+16.8	+17.7	+34.8
Expository	+19.1	+29.7	+34.3

All grades made pre/post gains on both stimuli. In addition, gains were generally larger for each subsequent grade on both stimuli. On the narrative sample, gains for grades 2/3 and 4/5 were about the same; and for grades 6/7, gains were the largest. Conversely, on the expository sample, grades 4/5 and 6/7 essays (which were about the same length) were much longer than grades 2/3 essays.

It appears, therefore, that the course of development on narration is somewhat different from exposition. The greatest pre/post gains in narrative production occur later than in exposition. The reasons for this trend are somewhat unclear since narration is considered easier than exposition.

Table 7-16 presents a summary of the pre/posttest (longitudinal) gains for the above and the below average groups on both stimuli.

Table 7-16
Pre/Post (Longitudinal) gains for Production
by Above and Below Average Groups

		Grade 2/3	Grade 4/5	Grade 6/7
Narrative	Above Average	+7.2	+20.2	+19.3
	Below Average	+23.1	+14.4	+50.5
Expository	Above Average	+7.7	+32.3	+30.8
	Below Average	+26.7	+26.0	+37.7

All above and below average groups made pre/posttest gains in production on both stimuli. Unlike the trend found for the total grades, however, the gains were not progressively higher for successive above and below average groups. Most striking are the grades in which above and below average students make their greatest gains. On both stimuli, above average students make their greatest gains at grades 4/5 (and most particularly on expository). On the other hand, below average students make their greatest gains on both stimuli at grades 6/7 (and more particularly on narrative). Thus it would appear that below average students seem to make their greatest gains in later grades than do the above average students--and then more on narrative than on expository.

Thus, the grade trends noted in Table 7-15 (that the greatest gains in narrative production occur later than in exposition) appear in the below-average group's trends.

Discussion

Production may be considered a "summary factor" like holistic ratings and rankings in that it is a reflection of the ease with which a student can handle the writing constraints, and it is a reflection of the speed with which a student writes.

On the expository, both the above and below average groups' production begin at about the same levels. Above and below average trends then parallel each other: there is a gradual progressive increase in production at grades 4 and 5; a decrease in production at grade 6 (which is relatively much greater for the below average group): and a "recouping" at grade 7. (It should be remembered that the sharp, relative decrease in production at grade 6 and 7 may be due to the greater percent of above average pupils in the grade 4/5 sample.)

The same trend is found in the narrative for the above average students: a gradual increase in production through grade 5, a sharp decrease at grade 6, and a recouping to slightly below 5th grade levels at grade 7. However, while below average students show a relative increase in production through grade 5, and a sharp decrease at grade 6, grade 7 below average students produce more than 7th grade above average students (almost as much as the 5th grade above average students).

Thus, on exposition, the above average groups produce more than their below average counterparts; above and below average group differences are maintained or increased after grade 4. On narrative, however, the difference between above and below average production generally decreases after grade 5 to the point where below average students produce more than above average students.

If production is a measure of "ease" as well as speed of writing, then it would appear that these above average students are more at ease with exposition (especially at grades 6 and 7) than the below average students; and the below average students are more at ease with narration, (especially at grade 7) as compared to the above average students. This is illustrated in Table 7-17 (below) which shows the difference in production between the two stimuli for above and below average students.

Table 7-17
Differences in Narrative and Expository Production for Above and Below Average Groups

___ = production was higher on exposition
○ = production was higher on narration

	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Above Average Groups	1.5	2.0	○ 6.0	6.1	12.0	23.5
Below Average Groups	.8	4.4	○ 2.6	9.0	○ 2.2	○ 15.0

Thus, as was noted in the discussion of ratings and rankings, below average pupils seem to experience greater relative success on narration than on exposition--relative to their above average counterparts.

The remaining writing characteristics analyzed are divided into three groups:

1. Syntactic factors (organization ratings, average T-Unit length, and average utterance length)
2. Content factors (content rating and number of words not on the Spache List of 1,000 common words and the Dale List of 3000 familiar words--words known to 80% of 4th graders).
3. Factors of form and mechanics (form rating, percentage of words misspelled, and handwriting rating).

For most of these, only the narrative sample was analyzed and for posttests only (grades 3, 5, and 7).

Organization Ratings

For both the pre and the posttest samples, three independent raters judged the organization of each paper on the following scale:

Examples of Organizational Ratings (Note: grammar and mechanics have been corrected)

1 = incoherent writing; no obvious connections between thoughts and/or utterances

Examples:

A. The tomatoes that the woman has green leaves
on the orange tomatoes at the Stop and Shop
in the store in it she old today in the store now.
(2nd grade, below average)

B. She picked for a picnic. She is picking. She
picked some for a surprise party.
(2nd grade, above average)

2 = listing of ideas; little or no connective design

Examples:

A. She is holding the tomatoes.
She has glasses.
And she is looking at something.
She is old.
She has a coat.
(2nd grade, below average)

B. This is a picture of an old lady at a grocery story.
She is going to buy some tomatoes.
Maybe she is going to buy some other foods like corn, apples, and other kinds of food that she needs.
Maybe she will make sauce for noodles.
This picture might be at a stand outside with all fruits and vegetables.
And a man or a lady might be working there.
(4th grade, above average)

C. I look up to my mother because she is comforting and knows a lot and understands everything.
And my mother knows how I feel and how I want to be and why I want to be that way and always takes me places and is always telling me right and wrong for my own good.
(4th grade, above average)

3 = organized writing; clear and purposeful design

Examples:

A. One day a lady went to the market. She saw some big red tomatoes so she thought to buy them. When she saw the tomatoes it had no price on it. She told a cashier and said $1.59. So she bought them. When she got home she ate one tomato. It was so good she ate another and another until she finished all the tomatoes. She was so tired that she went to bed. The next morning she wanted a tomato to eat. But there wasn't anymore left so she thought to herself - next time I'm going to eat only one tomato a day. And so the next day she got some more tomatoes and only ate one a day.
(4th grade - above average)

B. I look up to my friend __. We share everything and do everything together. __ is tall with blue eyes and brown hair. She is very pretty. We tell stories to each other and help each other with problems. We have lots of fun. For example we play bingo together. And if she wins she will take me out for an icecream or just save it for a rainy day. I admire her because she is my best friend.
(6th grade - above average)

Cross-Sectional Trends: Grades 2, 4, and 6 (Pretest)

Table 7-18 presents the mean organization ratings for grades 2, 4, and 6 for both stimuli.

Table 7-18
Mean Organization Ratings for Grades 2, 4, 6

	Grade 2	Grade 4	Grade 6
Narrative	1.5	2.2	2.1
Expository	1.9	2.0	2.4

On the narrative grade 2 students wrote little more than disconnected lists. The greater difference in organization ratings is found between grades 2 and 4. Little difference is found between grades 4 and 6. Both 4th and 6th graders wrote primarily loosely connected narratives.

On the expository, however, the greatest difference in the organization ratings occured between grades 4 and 6. Both grade 2 and 4 students seemed to write primarily "lists" of thoughts of why they admired their target persons. Grade 6 students tended to write more focussed essays. Pages 7-22,23 contain examples of different organizational ratings on the narrative and expository samples.

Table 7-19 presents the average organization ratings for above and below average students in grades 2, 4, and 6 on both stimuli.

Table 7-19
Mean Organization Ratings for Above and Below Average Groups
Grades 2, 4, 6

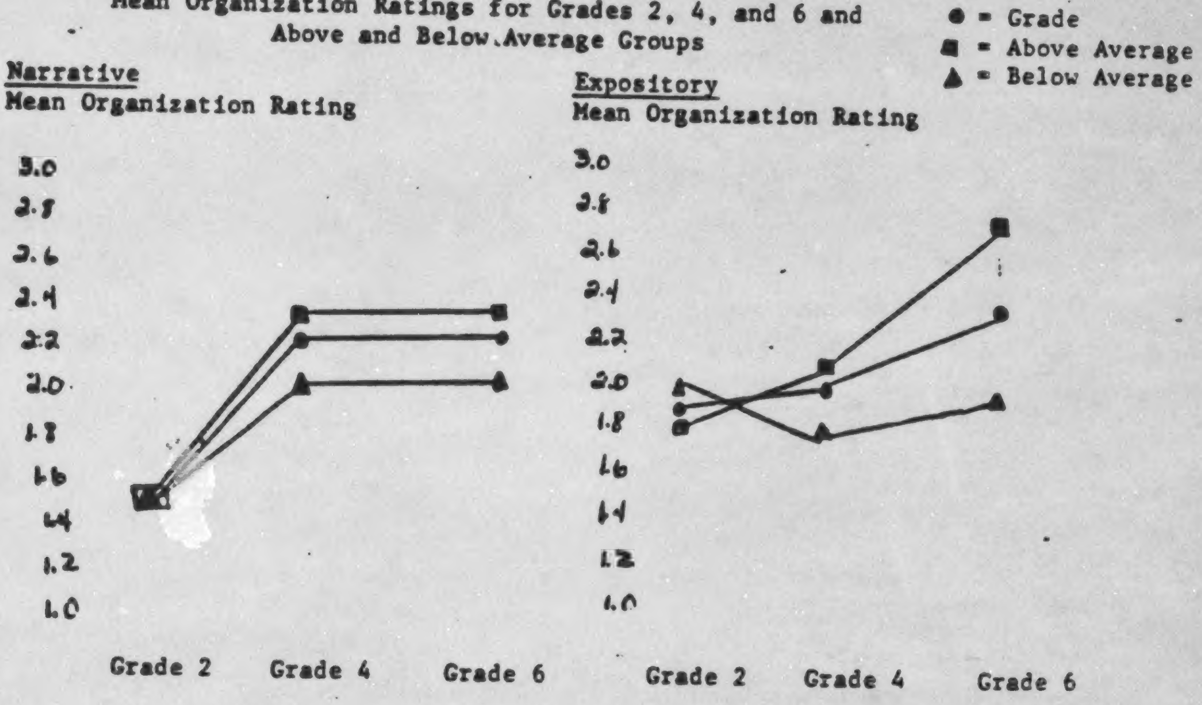
		Grade 2	Grade 4	Grade 6
Narrative	Above Average	1.5	2.3	2.3
	Below Average	1.5	2.0	2.0
Expository	Above Average	1.8	2.1	2.8
	Below Average	2.0	1.8	2.0

Table 17-9 indicates that, on the narrative both the above and below average trends resemble the total grade trends in ratings, rankings, and production. That is, both above and below average ratings for organization increase greatly at grade 4 (relative to grade 2) and remain above the same as grade 4 ratings at grade 6.

On the expository, however, the trend is different for below average pupils. There is little change in the organization of below average students from grade to grade; that is, in all three grades, below average students wrote primarily loosely connected lists of reasons for admiring whom they did. On the other hand, above average students show progressive increases in their organization ratings with successive grades. Only the above average students, then, confirm the expository trend found in total grades; their compositions showed marks of explicit design in grade 6.

Chart 7-7 graphs the mean organization ratings for grades 2, 4, and 6, and for above and below average pupils on both stimuli. The chart illustrates the trends noted in Tables 7-18 and 7-19. The chart clearly shows the difference between the narrative and the expository trends, for above and below average students. Most noticeable is the relative strength in organization that above average students show in grade 6 as compared to below average students.

Chart 7-7
Mean Organization Ratings for Grades 2, 4, and 6 and
Above and Below Average Groups



Grades 3, 5, and 7 (Posttest)

Table 7-20 summarizes the average organization ratings for grades 3, 5, and 7 for both stimuli.

Table 7-20
Mean Organizational Rating for Grades 3, 5, & 7

	Grade 3	Grade 5	Grade 7
Narrative	2.2	2.6	2.4
Expository	2.0	2.2	2.3

On the narrative, the greater difference in organization ratings is found between grades 3 and 5. Little difference is found between grades 5 and 7. Grade 3 students wrote little more than loosely connected stories. Both 5th and 7th graders wrote more clearly purposeful narratives than did 3rd graders. Although the ratings are higher for grades 3, 5, and 7 than they were for grades 2, 4, and 6, the post narrative trend resembles the pretest narrative trend.

The posttest exposition trend resembles the posttest narrative trend. That is, the greater difference (which was slight) in organization ratings is found between grades 3 and 5 for the expository. Less difference is found between grades 5 and 7. The range of the grades 3, 5, and 7 expository ratings, however, is much smaller than the narrative range. On exposition all grades seemed to write primarily lists of reasons why they admired whom they did — with varying degrees of connective design.

Table 7-21 presents the average organization ratings for grades 3, 5, and 7 and for above and below average students on both stimuli.

Table 7-21
Mean Organizational Ratings for Above and Below Average Groups
Grades 3, 5, & 7

		Grade 3	Grade 5	Grade 7
Narrative	**Above Average**	2.3	2.6	2.5
	Below Average	2.2	2.6	2.3
Expository	**Above Average**	2.0	2.1	2.5
	Below Average	2.0	2.2	2.0

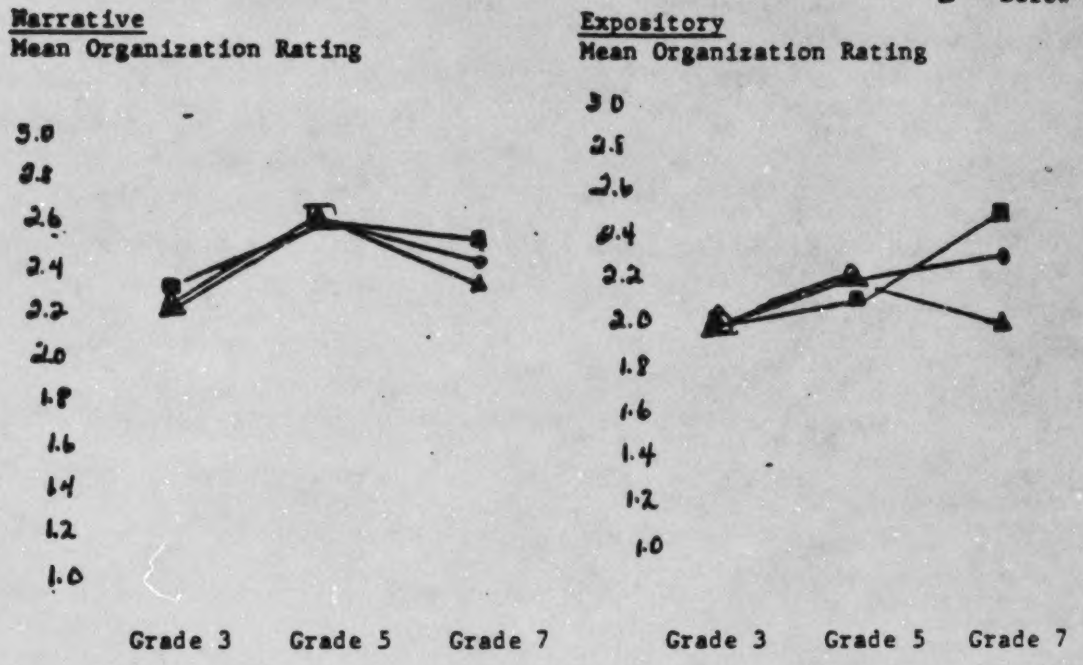
Both the above and below average trends resemble the whole-grade trend on narrative. The greater difference in ratings occurs between grades 3 and 5. At grade 7 there is a small decline in above average ratings (relative to 5th grade ratings) and a larger decline for below average ratings.

Both the above and below average trends resemble the whole-grade trend on expository. Above average students show progressive increases in organizational ratings with successive grades, with the greater difference in ratings occuring between grades 5 and 7. There is little change in the expository organization ratings for below average students; again (as in the grade 2, 4, 6 analysis), they wrote primarily loosely connected lists of reasons for admiring whom they did (as compared to above average students who, in grade 7, wrote with some explicit, organizational design).

Chart 7-8 graphs the mean organization ratings for grades 3, 5, and 7, and for above and below average pupils on both stimuli. We see the trends described in Tables 7-20 and 7-21. We note that above and below average ratings are fairly similar in narration, and they are also similar in exposition with the exception of grade 7 where above average ratings are clearly higher. The same phenomenon is observed in Chart 7-7 for grades 2, 4, 6; the most remarkable difference in above and below average ratings was at grade 6 on exposition.

Chart 7-8
Mean Organization Ratings for Grades 3, 5, and 7 and
Above and Below Average Groups

● = Grade
■ = Above Average
▲ = Below Average



Pre/Post Gains in Organization

Table 7-22 presents a summary of the pre/post gains in organization ratings for total grades on both simuli.

Table 7-22
Pre/Post Gains (By Grade) in Organizational Ratings

	Grade 2/3	Grade 4/5	Grade 6/7
Narrative	+.7	+.4	+.3
Expository	+.1	+.2	-.1

All grades made pre/post gains in organization ratings on narration, with the amount of gain diminishing with successive grades. On exposition, there was little, if any, gain in organization ratings for any grade.

Table 7-23 presents a summary of the pre/post gains for the above and the below average groups on both stimuli.

Table 7-23
Pre/Post Gains (By Above and Below Average Groups) in Organizational Ratings

		Grade 2/3	Grade 4/5	Grade 6/7
Narrative	Above Average	+.8	+.3	+.2
	Below Average	+.7	+.6	+.3
Expository	Above Average	+.2	+0	-.3
		+ 0	+.4	+0

On narration, both the above and below average groups show patterns of gains in organizational ratings that are similar to the whole grade trend. That is, on narration, both the above and below average groups show gains that decrease over successive grades. For above average pupils greatest gains occurred at grades 2/3 and there were little gains at grades 4/5 and 6/7. For below average pupils, greater gains occurred at grades 2 to 3 and 4 to 5 with little gain at 6 to 7. The tendency in narrative for above average students to show greater relative increases earlier than below average pupils — and for below average pupils to make increases more gradually -- over a longer period of time -- has been noted particularly in production.

On the expository, the above average group gained only at grades 2 to 3; and the below average group showed gains only at grades 4 to 5. On both the narrative and the expositiory, then, gains suggest that the above average students might make their gains earlier than do below average students. This is the same trend as for the holistic ratings and rankings.

Discussion

Organization ratings evaluated the connectiveness and purposefulness of the design in the students' writing. We found that generally neither above nor below average pupils wrote much more than loosely connected narrations and expositions.

Above and below average students received about the same organizational ratings on narration at all grades. (See Charts 7-7 and 7-8.) On exposition, above and below average students received about the same organizational ratings at grades 2, 3, and grades 4, 5. However, at grades 6 and 7 above average pupils received much higher ratings compared to below average pupils. Since exposition is a more mature mode, we would not expect higher organizational ratings until later grades; however, it is interesting that at the later grades it is only the above average pupils who receive the higher ratings.

T-Unit Length

Average T-Unit length was calculated using guidelines provided by Hunt (1965). Our interest in calculating average T-Unit length was twofold: the T-Unit is one of the most frequently used measures of "syntactic maturity," and it is one of the few writing measures against which we could compare the results from our sample with those of other populations.

Cross-Sectional Trends in Average T-Unit Length Grades 2, 4, and 6 (Pretest)

Table 7-24 presents the average T-Unit length for grades 2, 4, and 6 on both stimuli.

Table 7-24

Average T-Unit Length for Grades 2, 4, 6

	Grade 2	Grade 4	Grade 6
Narrative	8.3	10.0	9.9
Expository	7.6	11.3	9.3

The trend in Table 7-24 is similar to that of production for grades 2, 4, and 6. That is, on both narration and exposition, 4th graders wrote the longest average T-Units. Sixth graders either had about the same length T-Units as did 4th graders (on narrative) or had shorter T-Units than did 4th graders (on expository). Overall, then, 4th graders show a great gain in T-Unit length (compared to 2nd graders), and 6th graders show a plateau or decline in T-Unit length (compared to 4th graders).

Table 7-25 presents the average T-Unit length for grades 2, 4, and 6 and for above and below average readers.

Table 7-25

Average T-Unit Length for Above and Below Average Groups Grades 2, 4, 6

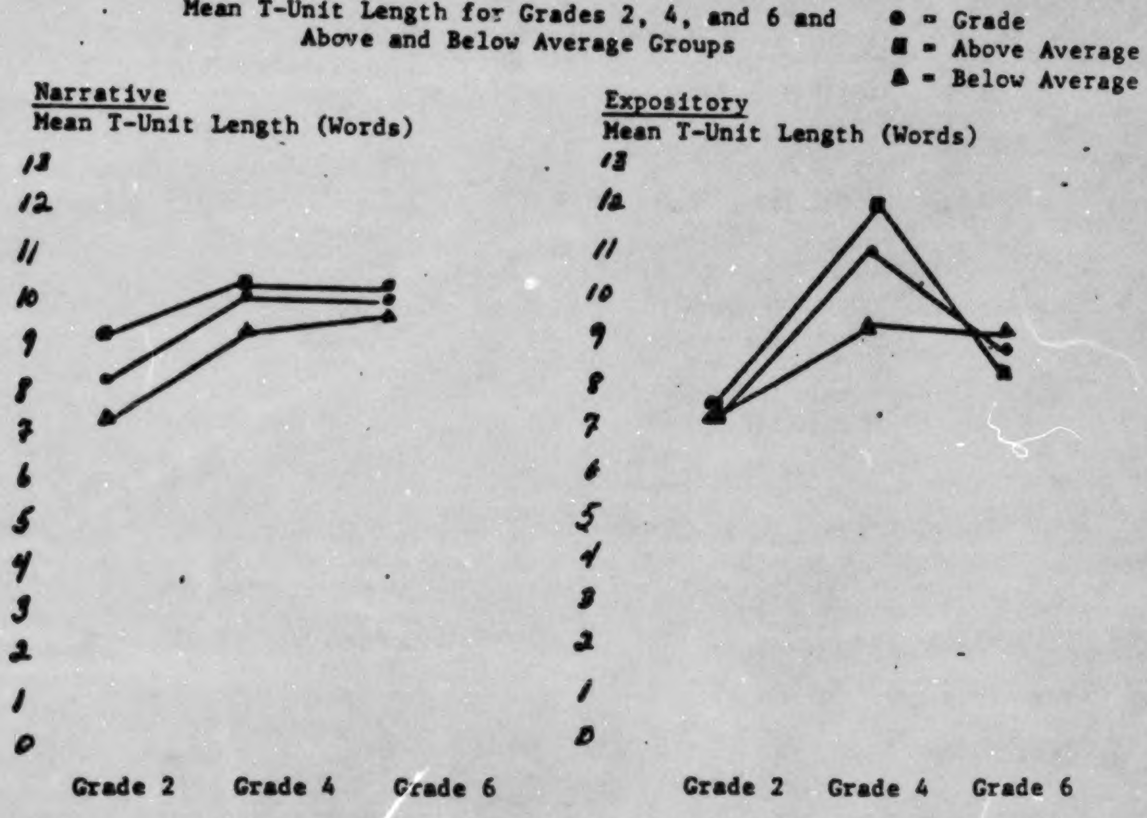
		Grade 2	Grade 4	Grade 6
Narrative	Above Average	9.3	10.6	10.2
	Below Average	7.5	9.1	9.6
Expository	Above Average	7.7	12.4	8.9
	Below Average	7.6	9.8	9.6

The above average T-Unit trends on both stimuli confirm the total grade trends. Generally, for above average students we find an increase in T-Unit length at grade 4 (compared to grade 2), and a tendency for T-Unit length to decrease at grade 6 (compared to grade 4). The grade 6 decrease is much sharper on exposition.

The below average T-Unit trends on both stimuli resemble the above average trends for grades 2 and 4: There is an increase in T-Unit length at grade 4 (compared to grade 2). At grade 6, however, instead of a "decline" in T-Unit length (compared to grade 4), below average students' T-Unit length remains at the grade 4 level (on exposition) and slightly above grade level (on narrative).

Chart 7-9 graphs the mean T-Unit length for grades 2, 4, and 6, and for above and below average on both stimuli. The Chart illustrates the trends noted in Tables 7-24 and 7-25. On narration, above average pupils consistenly wrote longer T-Units than did below average pupils although the difference diminished over successive grades. On exposition, the only above and below average differences -- which are quite great -- occur at grade 4. The great difference is due to the sharp increase in T-Unit length made by above average 4th graders (compared to grade 2) followed by an almost equally sharp decrease. All other above and below average grade 2, 4, 6 T-Unit trends have more gradual slopes.

Chart 7-9
Mean T-Unit Length for Grades 2, 4, and 6 and
Above and Below Average Groups



Grades 3, 5, and 7 (Posttest)

Table 7-26 present the average T-Unit lengths for grades 3, 5, and 7 on both stimuli.

Table 7-26
Average T-Unit Length Grades 3, 5, 7

	Grade 3	Grade 5	Grade 7
Narrative	10.4	12.3	11.8
Expository	8.9	11.2	10.7

Overall grade trends for grades 3, 5, and 7 are the same as for grades 2, 4, and 6 (see Table I). On both the narrative and expository, fifth graders wrote the longest average T-Units. The fifth grade T-Units were considerably longer than those of the 3rd graders. Seventh graders wrote slightly shorter T-Units than did 5th graders. Overall, then, 5th graders show a great gain in T-Unit length (compared to 3rd graders) and 7th graders show a slight decrease in T-Unit length (compared to 5th graders).

Table 7-27 presents the average T-Unit lengths for grades 3, 5, and 7 above and below average readers on both stimuli.

Table 7-27
Mean T-Unit Length for Above and Below Average Groups
Grades 3, 5, 7

		Grade 3	Grade 5	Grade 7
Narrative	Above Average	9.0	13.0	12.8
	Below Average	11.3	11.4	10.8
Expository	Above Average	8.0	12.9	10.6
	Below Average	9.5	8.9	10.8

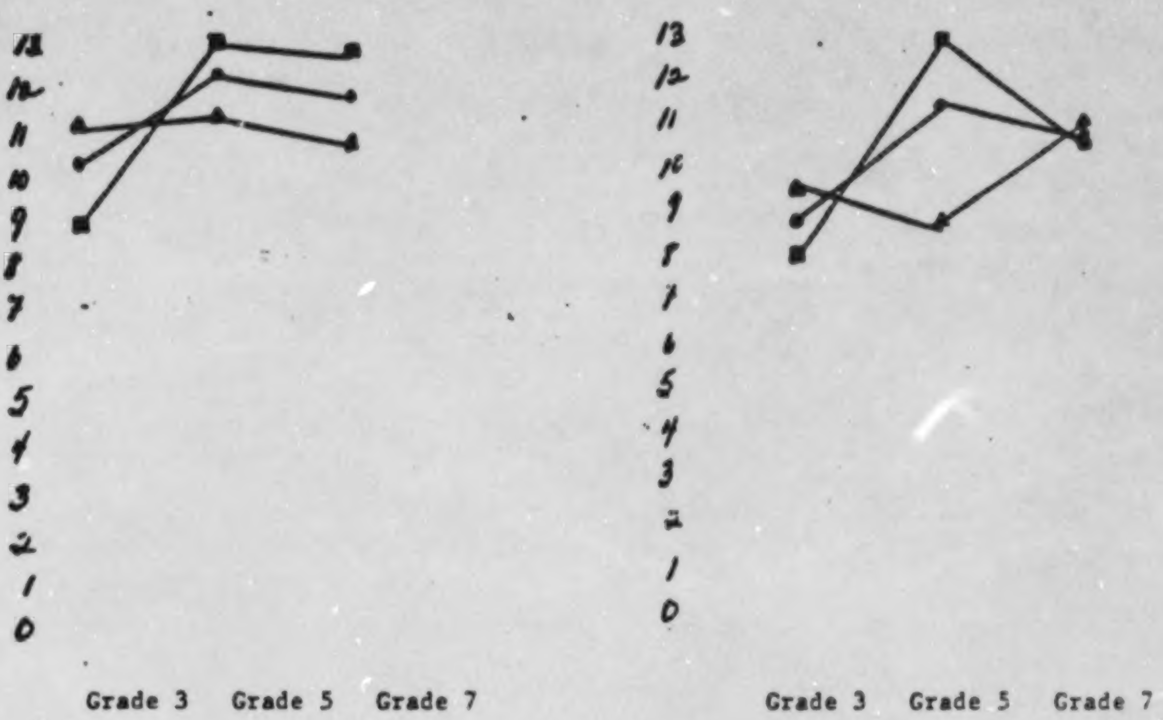
The above average T-Unit trends (on both stimuli) confirm the grade 3, 5, 7 trend (Table III) and the grade 2, 4, 6 above average trend (Table II). Generally, for the above average pupils, there is an increase in T-Unit length at grade 5 (compared to grade 3) and a tendency to decrease at grade 7 (compared to grade 5). The grade 7 decrease is sharper for exposition.

The below average T-Unit trends do not confirm the grade 3, 5, 7 trends. On the narrative sample, below average T-Unit length was approximately the same at grades 3 and 5 and slightly shorter at grade 7 (compared to grades 3 and 5). On the expository sample, below average T-Unit length was somewhat shorter at grade 5 (compared to grade 3) and somewhat longer at grade 7 (compared to grades 3 and 5).

Chart 7-10 graphs the mean T-Unit length for grades 3, 5, and 7 and for above and below average groups. The chart illustrates the trends described in Tables 7-26 and 7-27. Chart 7-10 can be compared with Chart 7-9 (grade 2, 4, 6) for trends. The expository pattern is about the same; there are little above and below group differences except at grade 5. On narrative at grades 3, 5, 7, the pattern differs slightly from the grade 2, 4, 6 trend. Below average differences in T-Unit length at grades 3, 5, and 7 increase in favor of the above average pupils, over grades (as opposed to the diminishing differences noted at grades 2, 4, 6).

Chart 7-10
Mean T-Unit Length for Grades 3, 5, and 7 and
Above and Below Average Groups

● = Grade
■ = Above Average
▲ = Below Average



Narrative
Mean T-Unit Length (Words)

Expository
Mean T-Unit Length (Words)

Pre/Post Gains in T-Unit Length

Table 7-28 presents a summary of the pre/post gains in T-Unit length for whole grades on both narration and exposition.

Table 7-28
Pre/Post Gains (By Grade) in Mean and T-Unit Length

	Grade 2/3	Grade 4/5	Grade 6/7
Narrative	+2.1	+2.3	+1.9
Expository	+1.3	-.1	+1.4

On narration, all grades made pre/post gains in T-Unit length of about 2 words. On exposition, there was a one word increase from grades 2 to 3 and 6 to 7. There was little change in expository T-Unit length from grades 4 to 5. Narrative increases in T-Unit length were greater than expository increases for each grade.

Table 7-29 presents a summary of the pre/posttest gains for the above and below average groups on both stimuli.

Table 7-29
Pre/Post Gains (By Above and Below Average Groups)
for Mean T-Unit Length

		Grade 2/3	Grade 4/5	Grade 6/7
Narrative	Above Average	-.3	+2.4	+2.6
	Below Average	+3.8	+2.3	+1.2
Expository	Above Average	+.2	+.5	+1.7
	Below Average	+1.9	-.9	+1.2

On narration, the above average groups show little gain in T-Unit length from grades 2 to 3 but show gains of about 2 1/2 words from grades 4 to 5 and 6 to 7. Below average pupils show decreasing gains in T-Unit length over grades: from 4 to 2 to 1 word.

On exposition, the above average groups again show little gain in T-Unit length from grades 2 to 3 but show higher gains from grades 4 to 5 and 6 to 7. Gains for below average students on exposition fluctuate greatly on a generally diminishing trend.

In general, it appears that for T-Unit length, below average students make their stronger gains earlier than do the above average students -- especially on narration.

Discussion

Our sample is small, but it is still interesting to compare our population's average T-Unit length (by grade) with those from three other studies that investigated T-Unit length, in primarily middle-class children's writing. Table 7-30 presents that comparison.

Table 7-30
A Comparison of Three T-Unit Studies to Our Sample

Author	Population	Grade	Mode	Mean T-Unit Length	Present Sample	Difference
Heil (1976)	Garden City, NY Mostly white	2	Narr.	8.69	8.3	-.39
			Exp.	10.65	7.6	-3.01
		3	Narr.	8.54	10.4	+1.86
			Exp.	11.13	8.9	-2.23
Hunt (1965)	90-110 IQ	4	Narr. Exp.	8.6	(Narr=10/ Exp=11.3) 10.65	+2.01
		8	Narr. Exp.	11.5	(Narr=10/ Exp=10.7) 11.25 (Grade 7)	-.25
Perron (1976)	Metropolitan GA All white Middle class	3	Narr.	7.20	10.4	+3.2
			Exp.	8.15	8.9	+ .75
		4	Narr.	8.91	10.0	+1.09
			Exp.	8.98	11.3	+2.32
		5	Narr.	9.56	12.3	+2.74
			Exp.	10.42	11.2	+ .78

Our sample tends to write equally long T-Units, if not longer T-Units, than do children in the Hunt (1965) and Perron (1976) studies. Heil's (1976) subjects (who wrote longer T-Units than did Hunt's and Perron's) wrote longer T-Units than did our subjects (except on grade 3, narration).

In both the Heil and Perron studies, subjects wrote longer expository T-Units than narrative T-Units. In our sample, both the above and below average students tend to write longer narrative T-Units (except at grade 4). This is especially true for above average students.

As Hunt notes, T-Unit length can be attributed to several factors: embedded clauses, compound verbs, lists, and prepositional phrases, etc. A detailed analysis of the clause types written by the study's pupils remains to be completed. However, the following general observation can be made. Although the subjects in this study wrote longer T-Units than pupils in the Hunt and Perron studies, the T-Units may not "better." For example, the following 18 word T-Unit (A) is not necessarily less "mature" than the 37 word T-Unit (B) which follows it.

A) The reason why I look up to her is because she is trustworthy and responsible to do things. (18 words)

(1 adjective clause)
(1 noun clause) (predicate nominative)
(1 "and" joining predicate adjectives)
(1 prepositional phrase)

B) And my mother knows how I feel and how I want to be and why I want to be that way and always takes me places and is telling me right and wrong for my own good. (37 words)

(3 noun clauses) (direct objects)
(3 "ands" joining direct objects)
(2 "ands" joining verbs)
(1 prepositional phrase)

Although example (B) has more embedded clauses, there is no variation in the kinds of clauses used, largely due to the list-like nature of the

T-Unit. Following is an example of a 21 word T-Unit (c) whose length is due to "lists" of verbs and prepositional phrases:

> C) She picked the tomatoes and made a salad with the tomatoes for a picnic with her friends and neighbors and relatives. (21 words)
>
> (1 "and" joining verbs)
> (2 "ands" joining objects of a preposition)
> (3 prepositional phrases)

As previously noted, "listing" is also characteristic of the subjects' organization patterns.

Utterance Length

Utterance length is similar to sentence length. We could not calculate sentence lengths because of the large number of poorly formed and punctuated "sentences." Thus, to count utterances, a student's text was read aloud or subvocally, and when a sensical utterance (i.e. a "sentence") was found, its beginning and end were marked -- irrespective of its boundary punctuation and/or capitalization. Utterances connected by "and" were not automatically separated into two discrete utterances. If the relationship between the two utterances seemed "reasonable" and "expected," then the two utterances were counted as one (i.e. a compound). Three separate raters made such utterance counts independently

Average Utterance Length for Grades 3, 5, and 7 Narratives*

Table 7-31 presents the average narrative utterance length for grades 3, 5, and 7, and for above and below average students.

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*The objective of the remaining discussion of measured writing factors is to confirm/disconfirm the trends found in the holistic rating and rankings, and in average production. Thus, from here on, discussion will be restricted to the posttest narrative samples. We have chosen the narrative because it is the kind of writing that children most often use in the elementary grades and because it might show more differentiation between the children in our sample than might exposition.

Table 7-31
Average Utterance Length Grades 3, 5, 7
Narrative

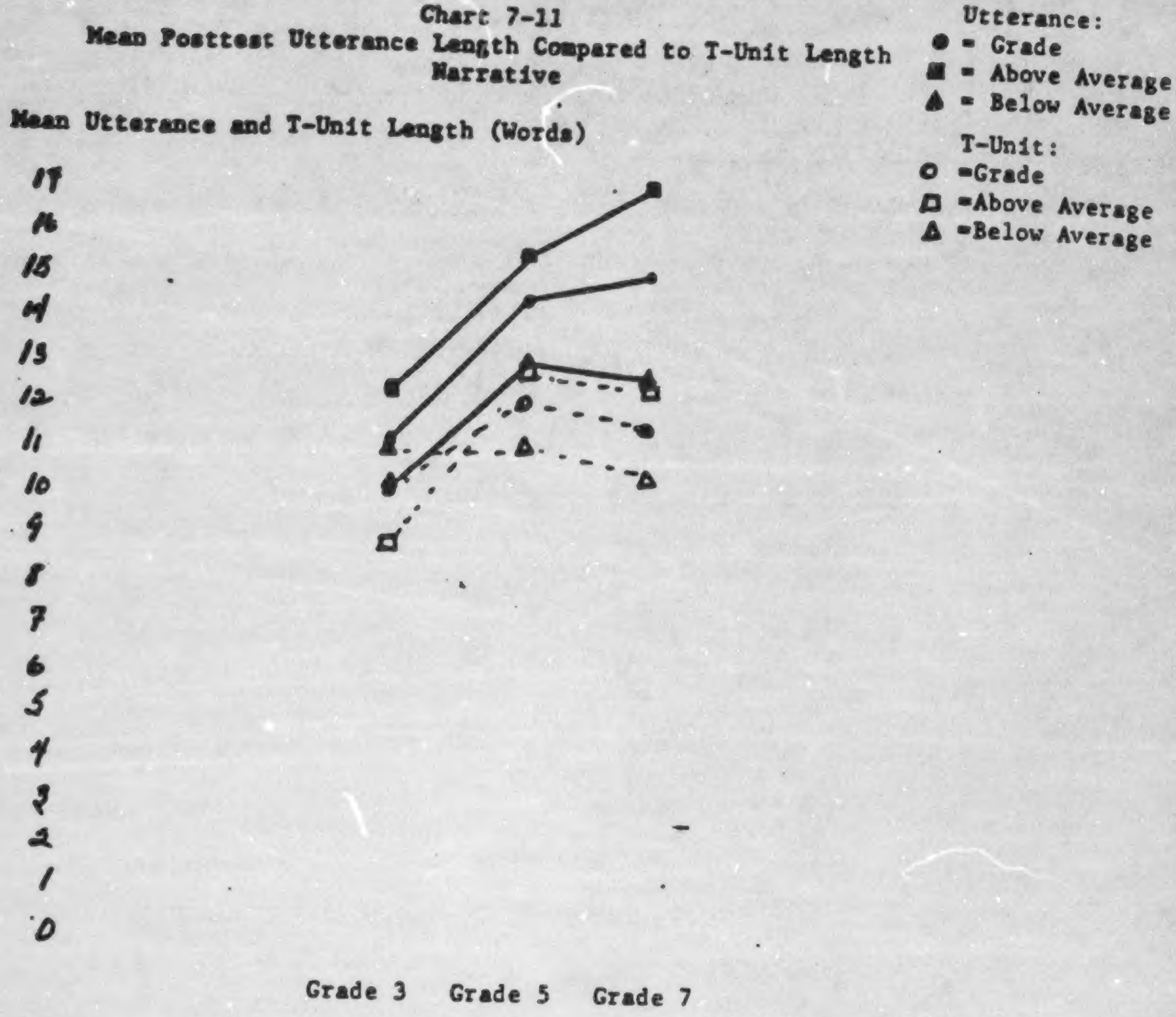
Average for:	Grade 3	Grade 5	Grade 7
Grade	11.4	14.7	15.1
Above Average	12.7	15.7	17.2
Below Average	10.5	13.2	13.0

The overall grade trend for utterance length resembles the posttest narrative grade trends for holistic score and holistic rank, production and T-Unit length. There is a substantial increase in utterance length at grade 5 (compared to grade 3) and a very small increase at grade 7 (compared to grade 5).

Chart 7-11 graphs the mean utterance lengths for grades 3, 5, and 7, and for above and below average groups on narrative. The chart illustrates the trends discussed from Table I. In addition, it can be noted how above average students consistently write longer utterances than below average students. Both the above and below average differences increase with successive grades.

Chart 7-11 also compares the posttest, narrative utterance trend with the posttest narrative T-Unit trend (marked with hollow symbols). We note the similarities between the total grade and above and below average trends on both utterance length and T-Unit length. We also note that the utterance trends are generally stronger than T-Unit trends (especially between grades 5 and 7).

Chart 7-11
Mean Posttest Utterance Length Compared to T-Unit Length
Narrative



Number of Unfamiliar Spache and Dale Vocabulary Used

In an effort to determine the level of vocabulary used in the writing, we counted the number of words used that were unfamiliar to the Spache list of 1,000 common words (Spache, 1974) and to the Dale list of 3,000 familiar words -- words known to about 80% of 4th grade students (Dale and Chall, forthcoming). Discussion of the trends in the students' use of unfamiliar vocabulary will be restricted to the posttest, narrative sample.

Trends in the Number of Unfamiliar Spache and Dale Vocabulary Used for Grades 3, 5, and 7, Narration

Unfamiliar Spache Words

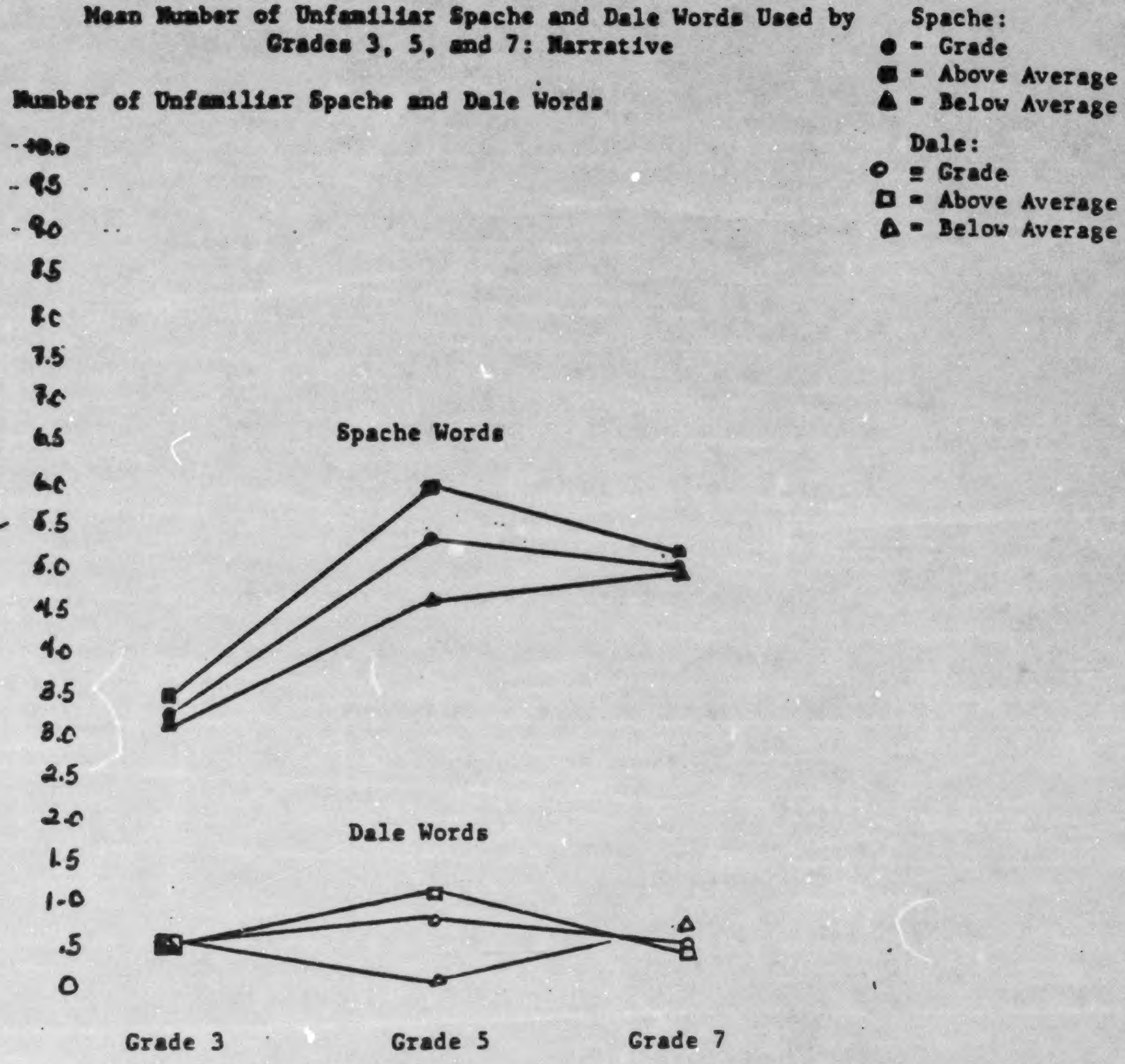
Table 7-32 presents the mean number of unfamiliar Spache words used at grades 3, 5, and 7 and by above and below average groups on narration.

Table 7-32
Mean Number of Unfamiliar Spache Words: Grades 3, 5, 7
Narrative

Average for	Grade 3	Grade 5	Grade 7
Grade	3.3	5.4	5.1
Above Average	3.5	6.0	5.3
Below Average	3.2	4.6	5.0

The overall post-narrative trend for the number of unfamiliar Spache words used resembles trends found in holistic scores, holistic ranks, and production. On the average, grade 5 students used about 2 more unfamiliar Spache words than did grade 3 students. Grade 7 students used about the same number of unfamiliar Spache words as did grade 5 students. Thus we see an increase at grade 5 (compared to grade 3) and a plateau/ decrease at grade 4 (compared to grade 5). Chart 7-12 graphs the trend presented in Table 7-32 (in solid figures). From the chart, it can also be noted that, while above average students use slightly more unfamiliar Spache words than do below average students, neither group uses very many unfamiliar words.

Chart 7-12
Mean Number of Unfamiliar Spache and Dale Words Used by Grades 3, 5, and 7: Narrative



Unfamiliar Dale Words

Table 7-33 presents the mean number of unfamiliar Dale words used at grades 3, 5, and 7 and by above and below average groups on narration.

Table 7-33
Mean Number of Unfamiliar Dale Words: Grades 3, 5, 7
Narrative

	Grade 3	Grade 5	Grade 7
Average for Grade	.5	.8	.6
Below Average	.5	1.1	.5
Above Average	.5	.2	.8

We note the extremely small average number of unfamiliar Dale words used by the students: generally less than 1 word per paper, across grades. Although trends exist (that resemble the trend found for unfamiliar Spache words used), there is little fluctuation in the use of unfamiliar Dale words when grades are compared with each other.

Chart 7-12 graphs the trends in the mean number of unfamiliar Dale Words, presented in Table 7-35 (hollow figures). We see clearly that students used fewer (if any) unfamiliar Dale words than unfamiliar Spache words.* We are left with the questions of why so little unfamiliar vocabularly is used in general and why the number does not increase appreciably over grades.

Content and Form Ratings

Trends in the Average Content and Form Ratings for Grades 3, 5, and 7, Narration

Three raters independently scored each paper on a scale from 1-4 for both content and form. Measurement of both content and form was based in part on work done by Grubb (1981).

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*As Tables 7-32 and 7-33 illustrate, the trends in the use of unfamiliar vocabulary are fairly similar to those of other writing measures. However, there is little fluctuation in the absolute number of unfamiliar vocabulary words used as compared to total production. Thus, as the papers lengthen over grades, use of unfamiliar vocabulary does not increase, the percentage of use **decreases**.

Content

The content rating is a composite measure of a paper's cohesion (as discussed by Halliday and Hasan, 1976); interest and humor; complexity and development; and overall coherence. Specifically,

4 = an interesting, varied presentation developed logically and with such strategies as cause/effect, illustration, example, detail, etc.

3 = an interesting, slightly varied presentation developed primarily through enumeration of fact with some explicit connection made between facts

2 = a "flat" list of facts or details

1 = a sentence or two that are generally unconnected; no "story" is told.

Examples of Content Ratings (On examples - grammar, mechanics have been corrected)

4 = an interesting, varied presentation developed logically and with such strategies as cause/effect, illustration, example, detail, etc.

Example:

7th, above average:

She's holding the tomatoes and showing them to someone, asking if they're ripe enough. She's arguing with the person. She says she wants them for half price, but she can't so she's very mad. The person is saying, "Buy them at full price, or don't buy them at all." The lady doesn't have enough money, so she's not going to buy them. But she does say she needs them for her recipe. She put something else back and finally bought the tomatoes at half price.

3 = an interesting, slightly varied presentation developed primarily through enumeration of fact with some explicit connection made between facts.

Example:

5th, below average:

She's in a market looking for tomatoes and she finds three tomatoes that are bad. She said to the guy, "These tomatoes are bad." Then he said, "Hey lady, are you buying them or not?" "No! They're bad." "Then suffer lady." Then the lady said, "I'll buy them. How much are they?" she said. "A dollar five," he said. Then she said, "Bye " and went home and said, "That man down at the corner is selling bad tomatoes. Then her son goes down and buys a good tomato. And that was the end of that.

5th, below average:

The lady is picking tomatoes, and she looks like she is picking the biggest one there. And behind her is a whole rack of tomatoes. And I think she's asking someone how much it costs. I think she's mad because of the price of the tomatoes.

I think she is going to make a salad, or she is going to use it for spaghetti. I think she is going to make a sandwich out of those tomatoes, or I think she's going to eat it with salt like I eat tomatoes.

2 = a "flat" list of facts or details.

Examples:

3rd, below average:

The woman is holding some tomatoes. When she gets home she will eat them. Then, when she eats them all, she will get some more. Then when she eats them, she will get some apples. Then she will eat them.

3rd, below average:

She picked the tomatoes and made a salad with the tomatoes for a picnic with her friends and neighbors and relatives. Then they stayed the whole day. When she came home, she went to sleep.

1 = a sentence or two that are generally unconnected; no "story" is told.

Example:

3rd, above average:

She is selling some tomatoes. She has a customer, and she is looking at the customer.

Table 7-34 presents the mean content ratings received by grades 3, 5 and 7 and by both above and below average groups on the narrative stimulus.

Table 7-34

Mean Content Ratings for Grades 3, 5 7
Narrative

	Grade 3	Grade 5	Grade 7
Average for Grade	2.3	2.8	3.3
Above Average	2.4	2.9	3.3
Below Average	2.2	2.7	3.3

The content ratings were progressively higher with successive grades. As we have seen in most of the trends discussed previously, 5th grades show a considerable increase (compared to 3rd graders). However, 7th graders' ratings increase (compared to 5th graders) as much as 5th graders increased (compared to 3rd graders). In general, 7th graders show greater relative gains in content ratings than they show in holistic rating and ranking, production, organization, and T-Unit and utterance length.

Above and below average trends resemble the total grade trend. Equally strong gains are made at grade 5 (compared to grade 3) as at grade 7 (compared to grade 5) for both groups. The small above and below average group differences in content ratings at grades 3 and 5 seem to disappear at grade 7. On narration content then, above and below average students are rated about the same and increasingly "better" in higher grades.

In general, 3rd graders wrote mostly lists. While fifth graders showed some development within their stories, their narratives were still mostly list-like in nature. Seventh graders showed evidence of detail, elaboration, and connection between ideas.

Form

Factors considered in the form rating included mechanics (spelling, punctuation, capitalization); sentence structure; and grammar. Specifically:

4 = no "errors" or possibly 1 or 2 isolated errors

3 = a few isolated errors in mechanics and sentence structure; grammar is largely all right.

2 = sentence structure problems (i.e. run-ons) coupled with other grammatical and mechanical problems

1 = severe sentence structure problems (fragmentation) as well as severe grammatical and mechanical problems.

Form Examples (Note: The following essays have been typed in uncorrected form.)

4 = no "errors" or possibly 1 or 2 isolated errors

No Examples

3 = a few isolated errors in mechanics and sentence structure; grammar is largely all right

Example:

GPN2 (AA)

The lady is trying to figure out if she should buy the tomatoes or not. I think she is asking how much the tomatoes are. She will probably buy them and go on with the rest of her shopping. Then she will go home and cook dinner, if she doesn't like the tomatoes or the other food, she will probably bring the food back. Then she will buy some more food for the next dinner.

2 = sentence structure problems (i.e., run-ons) coupled with other grammatical and mechanical problems

Examples:

PJN2 (AA)
(3rd)

The woman has some tomatoes and she is looking at someone to throe them at. there are three tomatoes coverd with a plastic sheet. the old woman has glasse and a string of pearls and a new dress. with stars on them.

ALN2 (BA)
(3rd)

She has some tomatoes. and then shes going to open them and then she going to make her supper and then when there done shes going to eat the supper and then wash up and go and watch tv and then put her nighties on and go to bed.

1 = severe sentence structure problems (fragmentation) as well as severe grammatical and mechanical problems

Examples:

WHN2 (BA)
5th

The lady is taking a tomato out of a package. and she will get in trobile if she got cot. and get in trobile and might not be able to go into the store agian. and if her mother and father find out and not like her that mush any more.

LRN2 (BA)
7th

The lady in this picture is bying tomatoes she is testing to feel if thay ar fresh if thay are she will put them in her caredej and pay for them wen she is thro shoping.

it look like she is chiking out som old gye in the supermarket that is what old ladis go shoping for.

Table 7-35 presents the average form ratings received by grades 3, 5 and 7 and both above and below average groups on narrative.

Table 7-35
Mean Form Ratings for Grades 3, 5, 7
Narrative

Average for Grade	Grade 3 1.9	Grade 5 2.0	Grade 7 2.3
Above Average	2.0	2.2	2.4
Below Average	1.8	1.6	2.1

Form ratings are progressively higher for successive grades. They are also slightly progressively higher from grade to grade for the above average students. Below average students' ratings show a slight decline at grade 5 (compared to grade 3) -- followed by a considerable increase at grade 7 (compared to grade 5) to slightly above their grade 3 level.

Although above average students received progressively higher form ratings by grade; their ratings ranged only from 2.0 - 2.4, from grades

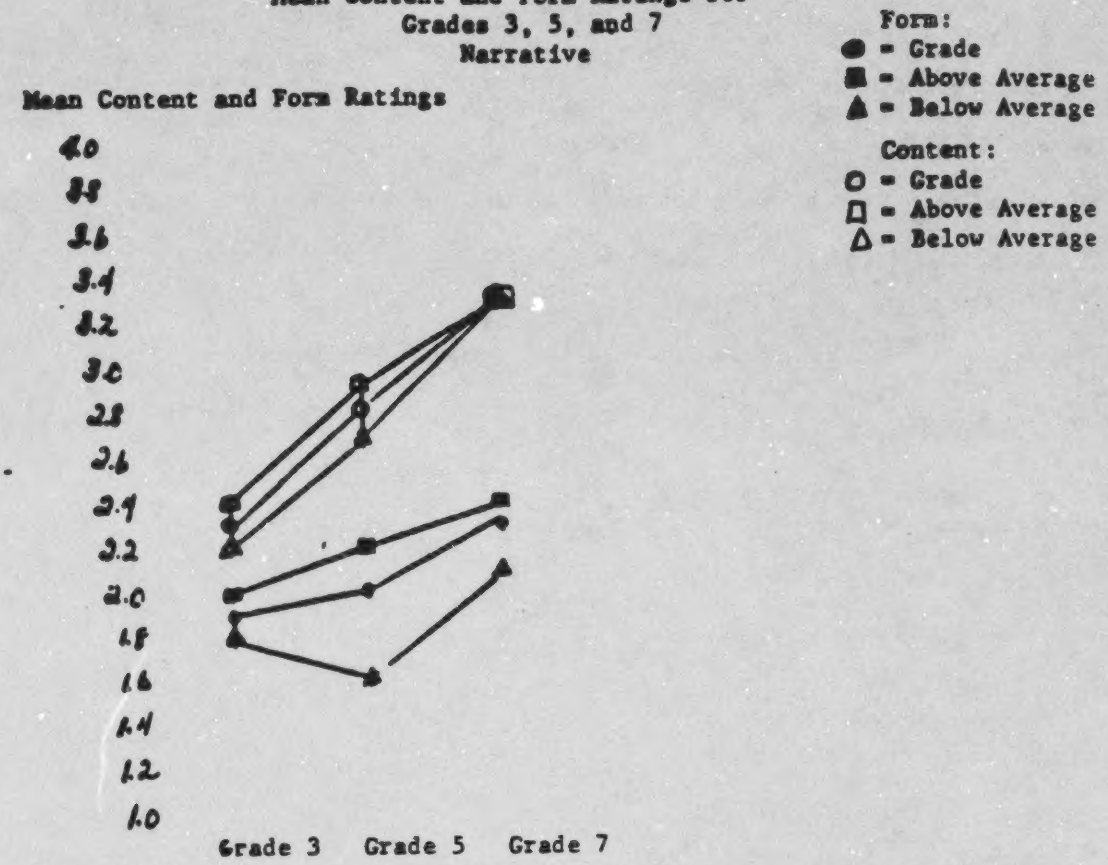
3 to 7. Their writing was generally rated as suffering some grammatical problems and the mechanical problems that result from the use of run-on sentences.

The below average students' ratings for form also remained low -- between 1.6 to 2.1. Their form ratings were consistently lower than those of the above average pupils. Their writing was generally rated as suffering from more severe sentence-structural problems as well as from grammatical and mechanical problems.

Chart 7-13 graphs the mean content ratings (hollow figures) and form ratings (solid figures) for grades 3, 5, and 7 for narration. From the chart, we note that content ratings are consistently higher than form ratings for both above and below average pupils. While the above and below average content ratings are similar, there appear to be consistent discrepancies in the form ratings. Generally, it would seen from these ratings that the students had "better ideas" than they were able to express in their writing. (Compare Shaughnessy, 1977).

Chart 7-13

Mean Content and Form Ratings for
Grades 3, 5, and 7
Narrative



Handwriting and Misspelled Words

Handwriting Ratings and Percent of Misspelled Words for Grades 3, 5, and 7, Narration

Handwriting

Handwriting was rated on a 1-3 scale where

1 = illegible handwriting, characterized by inconsistent spacing and irregularly shaped letters

2 = legible handwriting

3 = neat, stylized handwriting

An effort was made to rate manuscript and cursive writing according to their particular legibility. The handwriting scale is based in part upon scales from Grubb (1981) and Hammill and Larsen (1978).

Table 7-36 presents the mean handwriting ratings received by grades 3, 5, and 7 and by both above and below average groups, on narrative.

Table 7-36
Mean Handwriting Ratings for Grades 3, 5, 7
Narrative

	Grade 3	Grade 5	Grade 7
Average for Grade	1.9	2.0	2.3
Above Average	1.8	2.0	2.5
Below Average	2.0	2.0	2.0

The overall grade trend is for handwriting ratings to increase progressively with successive grades. Grade 3 and 5 ratings were about the same, and grade 7 ratings are higher than grade 5 ratings. The above average trend is similar to the total grade trend; their ratings are slightly higher at grade 5 (compared to grade 3) and much higher at grade 7 (compared to grade 5). The below average groups, however, received the same average ratings at grades 3, 5, and 7.

Chart 7-14 graphs the grade, above, and below average trends in handwriting ratings at grades 3, 5, and 7 on narration. The above and below average handwriting trends are similar to the trends in form ratings: generally there is a progressive increase in ratings for the above average groups but a general maintenance of grade 3 level ratings for the below average groups.

Chart 7-14

Mean Handwriting Ratings for Grades 3, 5, 7
Narrative

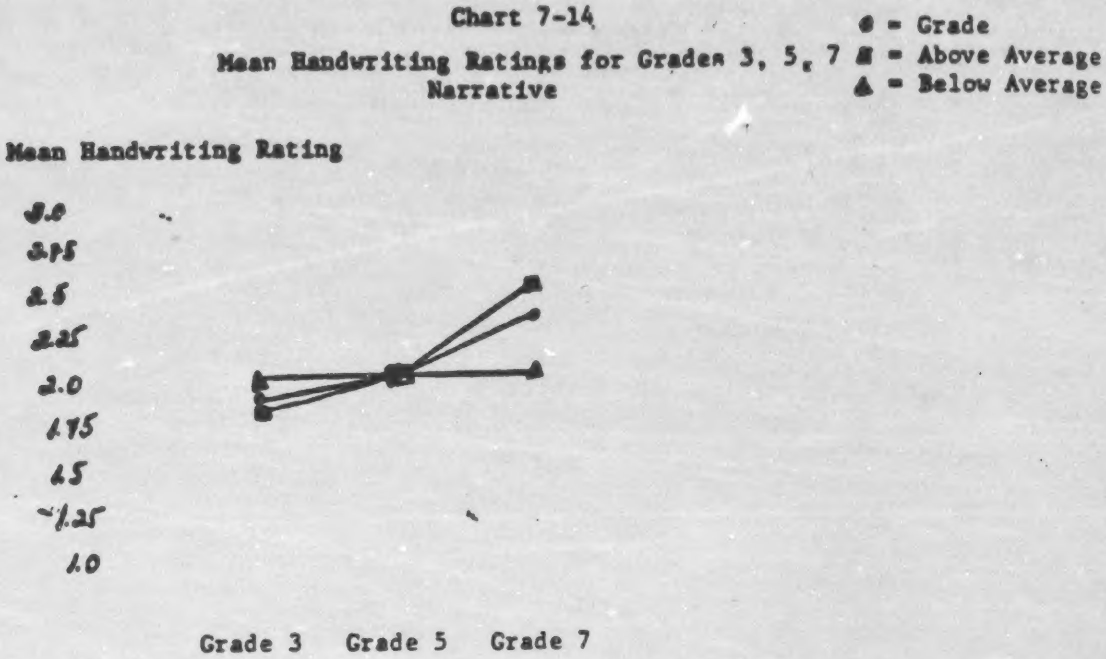


Table 7-37 presents the percentage of words misspelled by grade 3, 5, and 7 and by above and below average students on narrative.*

Table 7-37
Percentage of Misspelled Words for Grades 3, 5, 7
Narrative

Average for	Grade 3	Grade 5	Grade 7
Grade	6.5	7.9	8.9
Above Average	7.8	5.8	6.7
Below Average	5.6	10.8	11.0

Although we would expect the percentage of spelling errors to decrease with successive grades, we find the opposite trend for total grades. The overall grade trend shows the percentage of misspelled words increasing slightly with successive grades.

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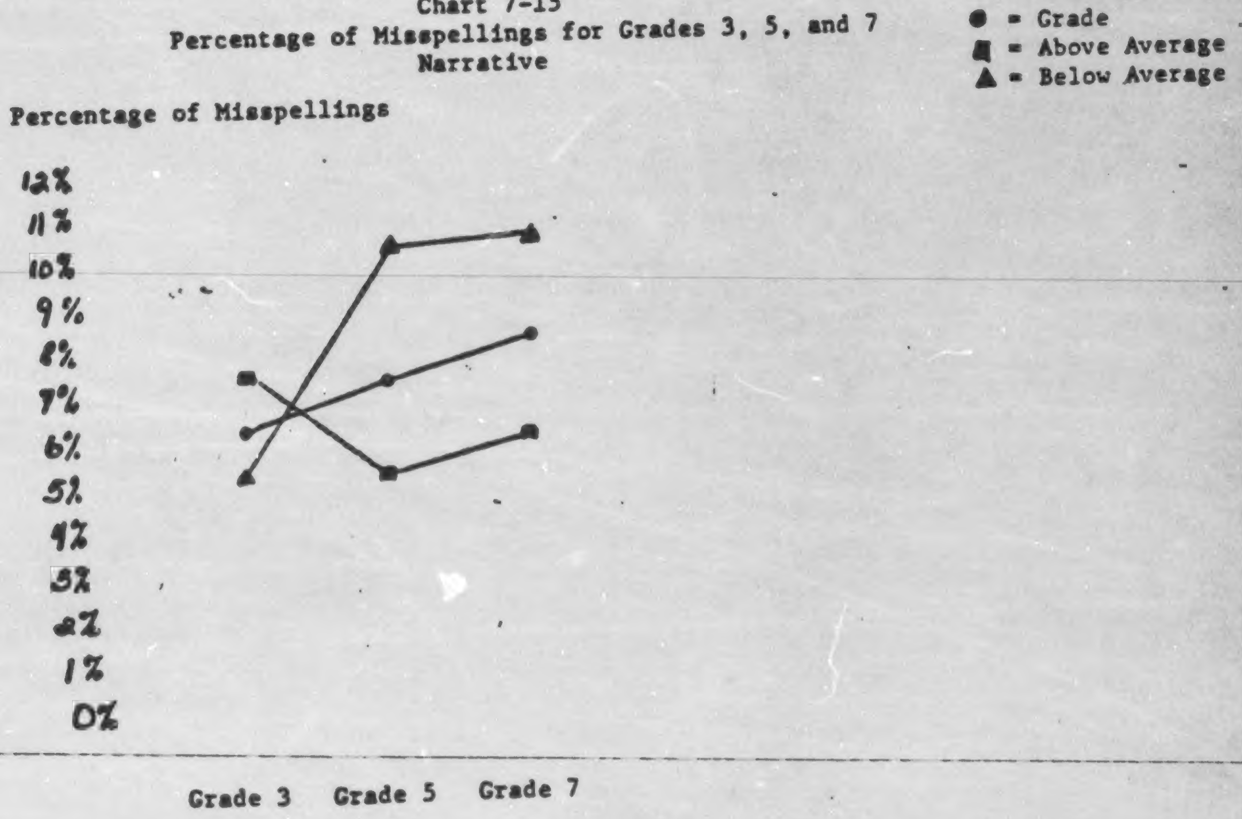
*Catalogued counts were made of misspelled words in an effort to determine if patterns of spelling errors emerge by grade and by above and below average groups. Such analysis is continuing. (See Cook, 1981)

The below average group's trend is similar to the total grade trend. Below average 5th graders show an increase in the percentage of misspelled words (compared to 3rd graders); below average 7th graders commit about the same percentage of misspellings as the 5th grade below average group.

The above average group trend, however, shows relatively little difference in the percentage of misspellings.

Chart 7-15 graphs the grade, above, and below average trends in percentage of spelling errors for grades 3, 5, and 7 on narration. The chart illustrates how below average percentage of misspellings increases over grades while the above average percentage of misspellings remains fairly constant.

Chart 7-15
Percentage of Misspellings for Grades 3, 5, and 7
Narrative



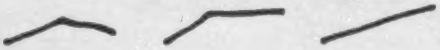
Summary Discussion

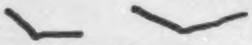
Three types of trends are found in the various writing ratings and measures. These will be summarized for grades 3, 5, and 7 narration. Trend Type I can be characterized by a positive increase in scores at grade 5 (compared to grade 3) followed by a slight increase, plateau, or slight decrease in scores at grade 7 (compared to grade 5). The Type II trend can be characterized by a decrease in scores at grade 5 (compared to grade 3) followed by a slight increase or plateau at grade 7 (compared to grade 5) the type III trend can be characterized by little difference in scores at any one grade from 3 to 7.

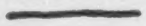
Table 7-38 summarizes the trend types found for the total grades, and for the above and below average groups.

Table 7-38

Trend Types for (Grades 3, 5, 7): Narration

Type I = 

Type II = 

Type III = 

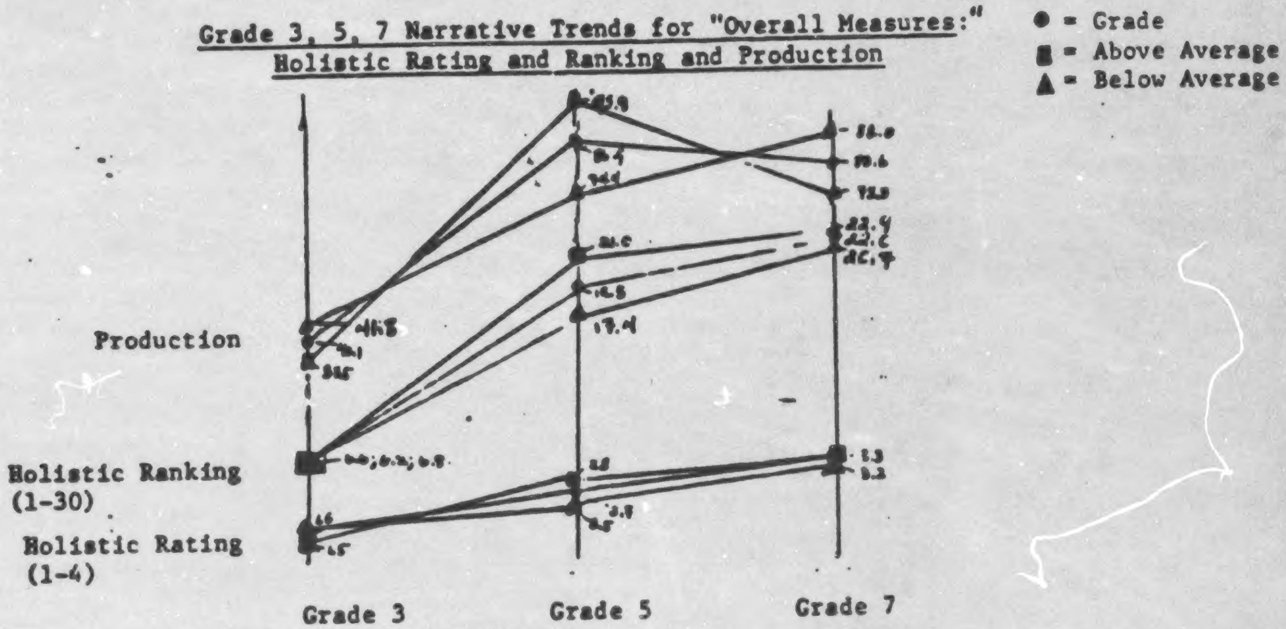
Measure	Factor	Total Grade	Above Average	Below Average
Overall	Holistic Score	I	I	I
	Holistic Rank	I	I	I
	Production	I	I	I
Syntactic/ Organizational	Organization Rating	I	I	I
	T-Unit Length	I	I	III
	Utterance Length	I	I	I
Content	Number Spache	I	I	I
	Number Dale	I/III	I/III	II/III
	Content Rating	I	I	I
Precision	Form Rating	I	I	II
	Handwriting Rating	III	I	III
	Percentage Misspelling	II	I	II

Overall Measures

Chart 7-16 illustrates the trend for holistic rating, holistic ranking, and production. The total grade and above and below average groups in grades 3, 5, and 7 on narration generally exhibit trend Type I: a considerable increase from grades 3 to 5 followed by a decelleration from grades 5 to 7.

Chart 7-16

Grade 3, 5, 7 Narrative Trends for "Overall Measures:" Holistic Rating and Ranking and Production

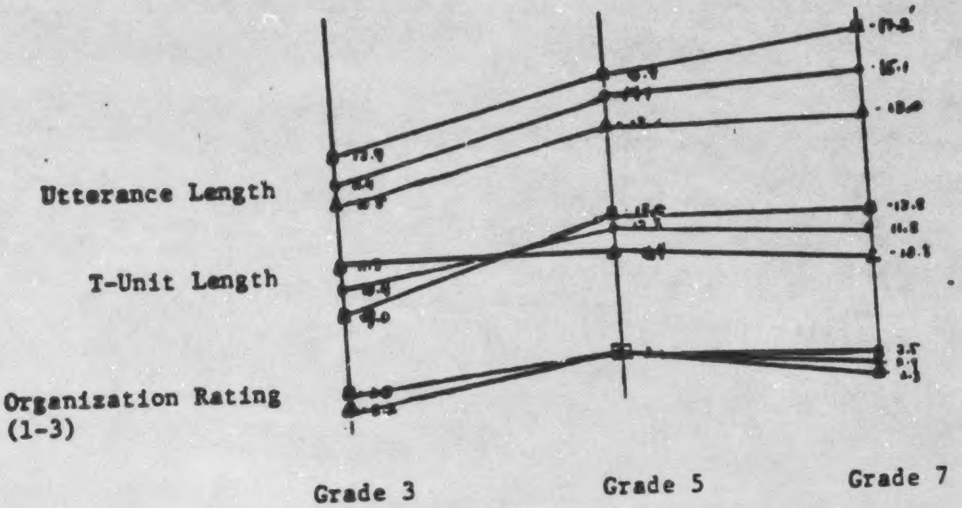


Syntactic/Organizational Measures

Most grade and above and below average scores in grades 3, 5, and 7 on narration exhibit Type I trends in the syntactic/organizational measures: organization rating, average T-Unit length, and average utterance length. Chart 7-17 illustrates the similarities of trends within these organizational factors and with the "overall measures" in Chart 7-16.

Chart 7-17

Grade 3, 5, 7 Narrative "Organizational" Trends-
Organization Rating and Mean T-Unit and Utterance Length

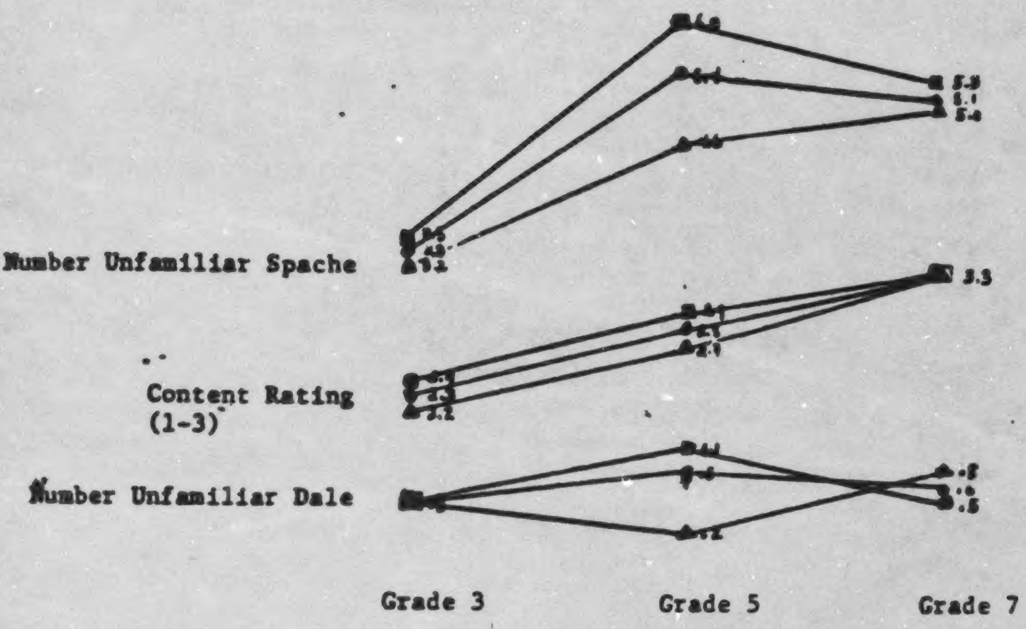


Content Measures

Chart 7-18 illustrates the grades 3, 5, and 7 narrative trends on the content measures: content rating, number of unfamiliar Spache words, and number of unfamiliar Dale words. Most grade and above and below average scores exhibit a Type I trend in content measuers that is similar to the trend found in overall and syntactic/organizational measures.

Chart 7-18

Grades 3, 5, 7 Narrative "Content" Trends-
Content Rating and Number of Unfamiliar Spache and Dale Words

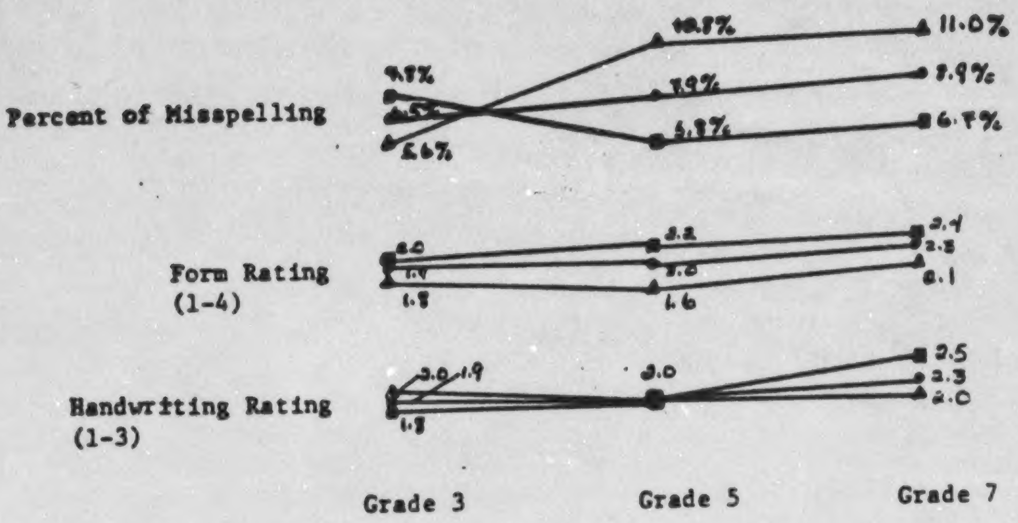


Precision Measures

Chart 7-19 illustrates the grades 3, 5, and 7 narrative trends on the "precision measures:" percentage of misspellings, form ratings, and handwriting ratings. For the first time we note consistent above and below average group differences in trends. The above average trends are consistently Type I, "positive" trends, while the below average trends are Type II or III trends--showing little or negative "growth" over grades.

Chart 7-19

Grades 3, 5, 7 Narrative "Precision" Factors:
Form Rating, Handwriting Rating, Percentage of Misspellings



Discussion

Total grade 3, 5, and 7 narrative trends for overall, syntactic/organizational, and content measures are Type I trends: we note increases at grade 5 (compared to grade 3) and a plateau at grade 7 (compared to grade 5). Total grade 3, 5, and 7 trends vary for the precision factors: while form ratings exhibit a Type I trend, handwriting ratings exhibit a Type III (nonchanging) trend; and percentage of misspellings exhibits a Type II (negative) trend.

Above average readers exhibit positive Type I trends on all overall, syntactic/organizational, content, and precision measures.

Below average readers also exhibit positive Type I trends but only on the overall measures and content measures. They exhibit the Type I (positive) and Type III (nonchanging) trends on syntactic/organizational measures. They exhibit Type III (nonchanging) and Type II (negative) trends on precision measures.

Thus it would seem that the above and below average students this study show especially similar "developmental" trends in overall rated "goodness," production, and content. It should be noted that, while both groups show similarly strong "growth" in overall ratings and production, both groups show similarly poor "growth" in the use of the more difficult "unfamiliar" vocabulary (Dale and Chall, forthcoming). They do well in use of unfamiliar Spache words (Spache, 1974).

The two groups differ somewhat in their "developmental" trends in syntactic/organizational measures (especially T-Unit length).

The two groups differ most noticeably in their "developmental" trends in precision measures of form, handwriting, and misspelling. It should be noted however that, while above average students exhibited stronger trends for form and handwriting, neither above nor below average students received high form or handwriting ratings in an absolute sense.

The cutting edge, then, between the above and below average students in our sample seems to reside in the more specific factors of form, handwriting, and spelling -- and somewhat in syntactic components.

Correlational Analysis for Writing Measures

Correlations were run on the narrative posttests for the entire sample, and for the grades separately--Grades 3, 5 and 7. Table I presents correlations for the various writing measures, by the total sample, and by the grades.

From Table I, we see that word production has the strongest relationship with the holistic ratings. The coefficient is highest for the total sample (.84), varies somewhat by the grade, but stays positive and strong for each grade (.74, .82 and .66 for grades 3, 5, and 7 respectively).

When the group is considered as a whole (30 children) most of the writing measures are highly predictive of the holistic ratings. The content measures (the content ratings) the number of words beyond the Spache 1000 and Dale 3000 are most highly associated with the judges' holistic ratings. Thus it would appear that semantic difficulty (as rated by the two word lists) and the researchers judgement of the maturity of the content (see p.) were most predictive of the overall judgment of goodness /maturity of the narrative sample.

The structural measures did not seem to be as predictive. Only the organization rating correlated significantly with the holistic rating for the total population and the handwriting and form ratings were also significantly associated with the holistic rating for the total population.

The correlations of the various writing measures in the separate grades with the holistic ratings were not as strong as for the total population. The only measure that held consistently was production--the number of words written. Form rating was significantly related to holistic ratings for grades 3 and 5, but not for grade 7.

Table I

Correlations with Holistic Ratings on the Narrative Sample, Posttest

	All 30	Grade 3	Grade 5	Grade 7
Word Production	.84	.74	.82	.66
Content Measures				
Content Rating	.68	NS	.61	NS
Spache #	.55	NS	NS	NS
Dale	.58	NS	NS	NS
Syntactic Measures				
Average T length	NS	.62	-.70	NS
Average Utterance	NS	.41	NS	NS
Organization Rating	.43	NS	.52	NS (almost +)
Form Measures				
Handwriting	.41	NS	NS	NS
o Misspelling	NS	NS	NS	NS
- Form Rating	.42	.41	.55	NS

Table II presents the correlations of the writing measures with holistic ranking on the Narrative Posttests. Generally the correlations are similar to those for the holistic ratings. The strength of word production is the same as it was for the holistic rating. The correlations are positive and high for the total population, and for each of the three grades separately.

The content measuresare changed somewhat, with only the content rating being significantly correlated. The word factors are not significant.

The syntactic factors remain similar, with only the organization rating significant.

For the mechanics and form, it is again only the form rating and handwriting that are significantly associated with holistic rankings.

As for the ratings, fewer of the measures are intercorrected significantly with the holistic rankings when the grades are considered separately.

Table II

Holistic Ranking

	Total 30	Grade 3	Grade 5	Grade 7
Word Production	.84	.74	.76	.64
Content Rating	.71	.54	.68	NS
Spache #	NS	NS	NS	NS
Dale #	NS	NS	NS	NS
Syntactic Measures				
Average T length	NS	.62	-.70	NS
Average Utterance	NS	NS	NS	NS
Organization Rating	.51	NS	.63	.64
Handwriting	.32	NS	NS	NS
o Misspelling	NS	NS	NS	NS
Form Rating	.32	.46	NS	NS

Factor Analysis of the Writing Measures

A factor analysis of the narrative sample, total population (pretest) produced three factors (see Table I). The factor with the highest loadings (Factor 1) appears to be a general writing factor, containing high loadings from the two holistic scores - ratings and rankings. Other high loadings were production and ratings of organization, content, and form.

The second factor seems to be related to form and structure (rating of form, and length of utterance) with somewhat of vocabulary use (Spache words).

The third factor seems to be similar to Factor 2, with a somewhat heavier emphasis on structure (T unit length) than content (% Dale words).

Table I

Factor Loadings for Total Population

Narrative-Pretest

Factor 1		Factor 2		Factor 3	
Words	.88	% Spache	.67	T Unit	.69
Holistic Rating	.93	Holistic Rank	.61	% Dale	.52
Holistic Rank	.88	Form	.56		
Organization	.79	Utterance	.67		
Content	.77				
Form	.56				

Table II presents the factor loadings for the total population on the Expository Pre-tests. The factor with the largest and strongest loadings seems also, as for the narrative sample, to be a general writing factor. It differs from the narrative sample only in the substantial loading of misspelled words.

The second factor appears to be a syntactic factor, with high loadings of T Units and utterancelength.

The third factor seems to be a form factor, with loadings from misspellings and form ratings.

Table II

Factor Loadings for Total Population

Expository-Pre-Test

Factor 1		Factor 2		Factor 3	
Words	.86	T Unit	.89	% Misspelling	.68
% Misspelling	.65	Utterance	.79	Form Rating	.63
Holistic Score	.96				
Rank	.96				
Organization	.69				
Content	.79				
Form	.51				

In sum, the factor analyses of the pretest data for all students, whether on the narrative or the expository sample, seem to reveal one general writing factor composed of holistic rankings and ratings, word production, and ratings of content, organization, and form.

The second and third factors are more heavily weighted by measures of form and structure for both narrative and expository samples, although these are more evident for the expository than the narrative samples.

Tables 3 and 4 present the factor analyses for the total posttests. Table 3 presents the Narrative sample and Table 4 the Expository.

Overall, the findings are similar to those for the pretests. As for the pretests the first factor for the narrative sample seems to be a general factor with similar loadings to that for the narrative pretest (Table I), containing high loadings for holistic ratings and ranks, production, and ratings of organization and content.

Two of the other factors seem to be form factors--(factors 2 and 4, Table III), with loadings on handwriting, form, T-units and utterances. The remaining factor appears to be a semantic factor, with loadings on % Dale and % Spache lists.

The posttest writing measures for the Expository sample (Table IV) tend to load more on form and structure, with such form measures as misspellings, handwriting, and form rating. These did not appear as strong on the post-narrative samples.

The second factor appears to be a semantic factor with loads from the Spache and Dale words.

A third factor also appears to be a structure factor, with loadings from T-Units and utterance length.

Table III

Factor Loadings for Total Population

Narrative-Posttest

Factor 1		Factor 2		Factor 3		Factor 4	
Words	.76	Handwriting	.71	Dale %	.99	T Unit	.89
Holistic Score	.82	Form	.68	Spache %	.59	Utterance	.61
Rank	.86						
Organization	.76						
Content	.86						

Table IV

Factor Loadings for Total Population

Expository-Posttest

Factor 1		Factor 2		Factor 3	
Number Words	.62	Number Words	.53	T Unit	.60
% Misspelled	-.62	% Spache	-.79	Utterances	.80
Holistic Score	.89	% Dale	-67		
Rank	.82				
Organization	.63				
Handwriting	.55				
Content	.84				
Form	.83				

LANGUAGE

Introduction

The language component of the study includes three measures: Vocabulary, Grammar and Language Awareness. These language tests were administered twice to the sample population: at the end of year 1 of the study (pretest, 1981), when the children were completing grades 2, 4 and 6, and at the end of year 2 (posttest, 1982), when the children were completing grades 3, 5 and 7. All language tests were administered orally, in individual sessions with each child.

We present here a description of the measures with some brief discussion of the children's gains from year 1 to year 2. Tables of the scores appear at the end of this section. The findings will be analyzed more completely below as part of the factor analysis presentation–for reading, writing and language.

I. Vocabulary

The WISC-R Vocabulary subtest was administered to each child, with individual responses written down verbatim by the interviewer. Raw scores and scaled scores were assigned according to standard WISC procedure. We computed in addition two 'special purpose' scores for each child based on responses to this same word list, in order to provide more detailed information about the children's responses for the purposes of this study.

Special purpose score A: Vocabulary knowledge

This measure was concerned with how many words the child knew or indicated familiarity with. A word was considered known even if the explanation was not complete or showed only partial knowledge. For example, for gamble acceptable answers were 'want some beer and can gamble to get it', or 'shouldn't do --

get money'. For diamond an acceptable response was 'ring or necklace or a pearl--see through pearl'. This score thus indicated how many words the child had come into contact with, using a fairly loose criteria, and accuracy and richness of content was left to special purpose score b.

Special purpose score B: Precision and sophistication of word definitions

This measure gave credit for use of sophisticated language in a response, for maturity of response form, and for report of two meanings in the case of ambiguous words.

We noted several features in the children's definitions that were of particular interest, and constructed this measure to give credit for them. One feature was the use of sophisticated vocabulary and phraseology in giving definitons, e.g., diamond: 'a valuable rock, a precious stone'; donkey: 'an animal related to the horse family'. Some of the children repeatedly used precise and advanced vocabulary of this sort in their responses, while in the responses of others such language was absent. Another feature was the child's ability to express a definition starting with the same part of speech as the word being defined, as, for example, defining nail as 'sharp metal object--holds things together' or 'something that goes into wood, piece of metal'--rather than 'fix stuff' or 'sticks to your finger'. Third, some children gave both meanings for an ambiguous word such as nail while others gave only one.

From the total WISC-R word list six items were selected for this measure: nail, alphabet, donkey, thief, brave, and diamond. All the children in the study responded to these six words, and the above precision/sophistication features were well represented in these reponses.

Gains from year 1 to year 2

Vocabulary (Special purpose score A). The vocabulary gains were highest from grade 2 to 3, slightly lower from grades 4 to 5, and lowest from grades 6 to 7. The above average group in greades 2/3 showed higher gains than the below average group. For grades 6/7 the gains of both above and below average groups were equal.

Precision (special purpose score B). Gains on the precision score were highest in grades 2/3, considerably less for grades 4/5, and least for grades 6/7. Above and below average groups show greatest divergence at the 7th grade with the above average group gaining at double the rate of the below average group.

II. Grammar

The Grammar score is a measure of syntactic knowledge. A composite Grammar score was constructed from the following four separate syntactic subtests.

A. Ask + wh- clause

This test assessed the children's knowledge of a complex construction involving the verb ask, namely subject assignment to an infinitive verb in a wh-complement clause following ask.

Note that in the following two constructions the subject of the verb eat is different:

a) John told Mary what to eat. (J told M what she should eat.)

b) John asked Mary what to eat. (J asked M what he should eat.)

Complement subject differs following tell and ask. In a) the subject of eat is Mary, whereas in b) the subject of eat is John. a) follows the normal pattern of English, whereas b) is an exceptional construction, subject to late acquisition in many children. Children who have not yet learned this exceptional property of the verb ask assign an incorrect subject to the complement verb, and often fail to interpret the sentence as indicating that a question is being asked.

B. Promise + complement clause

This test assessed the children's ability to assign the correct subject to an infinitive verb following promise, as in

c) John told Mary to shovel the driveway, (J told M that she should shovel...)

d) John promised Mary to shovel the driveway. (J promised M that he would shovel...)

In c) the subject of shovel is Mary, whereas in d) the subject of shovel is John. c) follows the normal pattern of English, whereas d) is an exceptional construction. Children who have not yet learned this exceptional property of the verb promise assign an incorrect subject to the infinitive complement verb in this construction.

C. Although

This test was intended to assess the children's knowledge of a particular complex construction following although. Note the different referent of the phrase done the same in the following sentences:

e) Mother scolded Gloria for eating the banana, and I would have done the same. (I would have scolded Gloria)

f) Mother scolded Gloria for eating the banana, although I would have done the same. (I would have eaten the banana)

Children who do not yet command this complex construction tend to assign the same referent to done the same in both of the above sentences, or (less frequently) assign the incorrect referent in both cases.

This test includes in addition a check on children's knowledge of the meaning of the word although, and their ability to use it appropriately in a simpler sentence-completion task:

Although it was raining outside, I ____________________.

My sister went to school yesterday although ____________________.

As it turned out, none of the children in the study succeeded in the complex task with e) and f) above, either in the pre- or post-test. This complex construction was thus rendered useless for the study. The simpler task of sentence-completion with although, however, did turn out to be a useful discriminator among the children. This simpler task, then, was used as the although subtest in the Grammar composite.

D. Tag questions

This test assessed the children's ability to form tag questions, i.e. to construct the appropriate tag (underlined portion of sentences below) to turn a statement into a question.

John likes to go to the movies, doesn't he?

Mary will be here on time, won't she?

In the test, the child is given the initial portion of the sentence and asked to add the correct tag. Formulating the tag correctly involves, among other things, identifying the subject of the sentence, replacing it with an appropriate pronoun, identifying the first auxiliary verb, and introducing the auxiliary verb do where necessary in the correct person and tense. These fairly intricate syntactic abilities tend to be acquired late by children.

Gains from year 1 to year 2 (on composite Grammar score)

In grades 2/3 and 4/5, the gains of the below average groups of children were higher than the gains of the above average groups. The percentage gains of the total group of below and above average children were 43% and 16% respectively.

Most of our sample children succeeded on the ask, promise and although constructions by the 7th grade.

III. Language Awareness

The Language Awareness Score is a measure of children's ability to view language objectively and formulate judgments about its properties. Metalinguistic ability has proved to be a good indicator of linguistic maturity and ability to manipulate language effectively. A composite Language Awareness score was constructed from the following four separate metalinguistic subtests.

A. Sentence acceptability (Grammaticality)

This test elicited judgments from the children about the acceptability of sentences of four different types:

1. fully grammatical, plausible (There were four people at the school.)
2. fully grammatical but implausible (The pencil weighs five pounds.)
3. systematically anomalous (The rock is very angry.)
4. syntactically deviant (The men looked at herself in the mirror.)

Success on this test required rejecting sentences of type 4, recognizing the structural acceptability of type 3, and accepting types 1 and 2.

B. Illicit comparison

This test assessed the children's ability to explain the deviance of sentences which make illegitimate comparisons, such as This math problem is harder than that rock.

Note that although we can say

The math problem is hard.

The rock is hard.

we cannot combine these two sentences into the comparative sentence above.

To succeed on this task the child must indicate that math problems and rocks cannot be compared because they are hard in different ways: a math problem is difficult (hard to do) whereas a rock is hard to the touch. Focusing on the ambiguity of the word hard and characterizing the abstract/concrete properties of math problems/rocks is a fairly sophisticated ability which children tend to acquire late.

C. Illicit conjunction

This test assessed the children's ability to explain the deviance of sentences which combine similar sentences in a way that is unacceptable. E.g., we can say both g) and h), but not i):

g) John caught the measles.

h) John caught the fast ball.

*i) John caught the measles and the fast ball.

Explaining the unacceptability of i) requires focusing on the word caught and indicating that it is used in two different ways in catch the measles and catch the ball. Recognizing and explaining the different uses of a word like catch in such a sentence is an ability that is typically acquired late in children.

D. Jokes and riddles

This test assessed the children's ability to explain what is funny about jokes and riddles that rely on ambiguity for their humor. For example

> Where would you go to see a man eating fish?
> To a sea-food restaurant.

In this riddle the question contains an ambiguous phrase:

j) a [man-eating] fish

k) [a man] [eating fish]

In j) it is the fish who eats the man, but in k) it is the man who eats the fish. The children were asked to explain what was funny about jokes such as these, and similar jokes that contained lexical ambiguities, surface structure ambiguities and deep structure ambiguities.

Gains from year 1 to year 2 (on Composite Language Awareness score)

In grades 2/3 and 6/7 the gains of the below average groups of children were higher than the above average groups. For grades 4/5 the gains of the higher and lower groups were about the same. For all grades the gains of the below average groups were about 66% as compared to 46% among the above average groups.

TOTAL LANGUAGE SCORE

The separate language scores described here were combined into a single overall Total Language Score, with the several components weighted as follows:

Vocabulary knowledge (spec. purp. score A)	40%
Vocabulary precision (spec. purp. score B)	10%
Grammar composite	30%
Language Awareness composite	20%

Table L-1

Vocabulary Knowledge*

	1981	1982	Change	Gain**
Grade	2	3		
Total Grade	57.50	68.87	11.37	.20
Above Average	48.75	63.75	15.00	.31
Below Average	63.33	70.83	7.50	.12
Grade	4	5		
Total Grade	76.66	87.08	10.33	.13
Above Average	77.85	89.28	11.28	.14
Below Average	75.00	84.00	9.00	.12
Grade	6	7		
Total Grade	80.00	86.25	6.25	.08
Above Average	81.25	87.50	6.25	.08
Below Average	78.75	85.00	6.25	.08
All Grades				
Total Group	71.17	80.50	9.30	.13
Above Average	71.00	82.00	10.93	.15
Below Average	71.33	79.00	7.66	.11

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*all scores are means

**gain from 1981 to 1982 as a proportion of the 1981 score

Table L-2

Vocabulary Precision and Sophistication of Word Usage[*]

	1981	1982	Change	Gain[**]
Grade	2	3		
Total Grade	9.5	25.00	15.50	1.63
Above Average	11.25	25.00	13.75	1.22
Below Average	8.33	25.00	16.66	2.00
Grade	4	5		
Total Grade	25.00	33.75	8.75	.35
Above Average	27.85	39.28	11.43	.41
Below Average	21.00	26.00	5.00	.24
Grade	6	7		
Total Grade	30.63	36.25	5.62	.18
Above Average	36.25	45.00	8.75	.24
Below Average	25.00	27.50	2.50	.10
All Grades				
Total Group	21.33	31.16	9.83	.46
Above Average	25.66	36.33	10.66	.41
Below Average	17.00	26.00	9.00	.53

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[*] all scores are means
[**] gain from 1981 to 1982 as a proportion of the 1981 score

Table L-3

Grammar Composite*

	1981	1982	Change	Gain**
Grade	2	3		
Total Group	57.25	85.00	27.75	.48
Above Average	66.25	76.25	10.00	.15
Below Average	51.25	90.83	39.58	.77
Grade	4	5		
Total Group	68.20	82.29	14.08	.20
Above Average	73.57	85.21	11.64	.15
Below Average	60.70	78.20	17.50	.28
Grade	6	7		
Total Group	71.50	83.42	13.42	.18
Above Average	68.25	82.37	13.12	.19
Below Average	74.75	86.16	13.83	.18
All Grades				
Total Group	65.43	83.50	18.63	.28
Above Average	70.20	81.80	11.60	.16
Below Average	60.66	85.32	26.17	.43

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*all scores are means
**gain from 1981 to 1982 as a proportion of the 1981 score

Table L-4

Language Awareness Composite*

	1981	1982	Change	Gain**
Grade	2	3		
Total Grade	16.66	29.99	13.33	.80
Above Average	16.66	24.99	8.33	.50
Below Average	16.66	33.33	16.67	1.00
Grade	4	5		
Total Grade	40.75	62.28	21.52	.53
Above Average	47.37	72.72	25.35	.53
Below Average	31.49	47.66	16.16	.51
Grade	6	7		
Total Grade	40.72	58.68	18.09	.44
Above Average	46.45	61.65	15.20	.32
Below Average	34.99	54.71	21.94	.62
All Grades				
Total Group	32.71	50.28	17.87	.54
Above Average	38.93	57.04	18.10	.46
Below Average	26.49	43.03	17.61	.66

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*all scores are means
**gain from 1981 to 1982 as a proportion of the 1981 score

Table L-5

Total Language Composite*

	1981	1982	Change	Gain**
Grade	2	3		
Total Grade	44.45	61.09	11.88	.26
Above Average	43.83	55.62	9.12	.20
Below Average	44.87	64.74	13.15	.29
Grade	4	5		
Total Grade	61.78	75.31	8.41	.13
Above Average	65.47	79.69	7.94	.12
Below Average	56.60	69.19	9.91	.17
Grade	6	7		
Total Grade	64.65	75.33	6.68	.10
Above Average	65.89	76.24	9.35	.14
Below Average	63.42	74.12	1.35	.02
All Grades				
Total	56.77	70.42	9.37	.16
Above Average	59.81	72.35	12.54	.20
Below Average	53.73	68.34	15.48	.28

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*all scores are means

**gain from 1981 to 1982 as a proportion of the 1981 score

Factor Analysis: Reading, Writing and Language

The factor analysis of reading, writing and language consisted of the following measures.

For reading, all of the six tests--word recognition, oral reading. phonics, word meaning, silent reading and spelling.

For writing, various measures of holistic ratings, rankings, ratings of content and form and counts of production, e.g. word usage, misspellings.

For language, various measures of word meaning, grammar, and language (metalinguistic) awareness.

This factor analysis was run only for the total population--for the pretests and the posttests.

For the pretests (See Table 1), one factor has loadings from 5 out of the 6 reading tests--all 5 of which require reading. Only word meaning does not have a high loading on this factor. Two of the writing measures also load substantially on this factor--ratings of content and form.

This factor, we have labeled reading and writing.

Another factor has loadings from word meaning, writing production, number of words outside the Spache 1000, and from two of the language measures--total language awareness and a subtest of it. This factor was labeled language and writing.

A third factor which has high loadings from grammar, total language and word meaning was labeled a language factor.

The fourth factor, weaker than the others, seems to be a writing and language factor--with loadings from three of the writing measures and one from language--number of words outside of Spache, rating of content and form, and precision and sophistication of word meanings.

Table I

Factors for the Pretests, Total Sample

Factor 1		Factor 2		Factor 3		Factor 4	
Word Recognition	.82	Word Meaning	.57	Word Meaning	.51	Number Spache	.45
Oral Reading	.85	Writing: Number of words	.63	Grammar	.74	Writing: Content	.44
Silent Reading	.77	Number Spache	.55	Total Language	.73	Writing: Form	.49
Phonics	.83	Language Awareness	.81			Precision and Sophisticated words	.48
Writing: Content	.61	Subtest of Language awareness	.83				
Writing: Form	.53						
(Reading and Writing)		Language and Writing		Language and Word Meaning		Writing and Language	

Posttests

The loadings for the posttests (Table II) are, on the whole, similar to those for the pretests. If the factor numbers are changed, we find a reading/word meaning/writing factor (factor 2) which resembles factor 1 for the pretests. This factor may also be viewed as a word precision factor--precision that cuts across accuracy of recognition of isolated words, accuracy of oral reading, spelling, vocabulary meanings, form rating in writing, and word precision and sophistication on the language test. Compared to factor 1 on the pretest analysis, factor 2 has a heavier loading of language measures.

Factor 1 of the posttest seems to be another reading factor--but with stronger focus on meaning--on two measures of vocabulary meaning and silent reading comprehension. The loadings of phonics and spelling suggest also the presence of a precision factor.

The three remaining factors are a writing factor (factor loadings from

4 writing measures); and 2 language factors with loadings from the language measures alone.

What is of special interest in these analyses is the relation between reading, writing and language.

Reading seems to be related more to the writing than to the language measures. This is more evident for the pretests. When reading is related to language measures, it is to word meaning, rather than to the language awareness and grammar measures. The syntactic and metalinguistic measures do not seem to be on the same factors as the various reading measures.

There is a greater tendency for the language measures to load on the same factors as the writing measures. Indeed, Factor 2, (Table 1) pretest total, seems to be such a language-writing factor.

Does this mean that language is more important for writing than for reading? Perhaps, for writing is productive and expressive, as compared to reading which is more receptive. As such writing requires a more active knowledge of language structure, syntax, and vocabulary.

Table II contains the factor loadings, with coefficients at .5 and above, for the posttest, total sample. Tentative factor names are listed at the bottom of the columns.

Table I

Factors for the Posttests, Total Sample

Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
Word Meaning	.78	Word Recognition	.68	Number of Words in Sample	.57	Language Awareness	.95	Grammar	.90
Silent Reading Comprehension	.81	Oral Reading	.81	Holistic Score	.58	Total Language	.65	Total Language	.47
Spelling	.52	Spelling	.73	Writing Organization	.84	Subscore grammar	.78		
Phonics	.68	Vocabulary Score	.54	Writing: Content	.85				
Vocabulary score	.82	Writing: Form	.81						
		Word Precision and Sophistication	.62						
(Meaning Vocabulary and reading comprehension)		(Word Precision)		(Writing)		(Language)		(Language)	

The language measures that load substantially on reading are the three measures of word meaning. But these are found on the posttests only. This finding is similar to that from the intercorrelations--with word meaning relating to reading only in the 7th grade, and with silent reading comprehension,

From the factor analyses and from the intercorrelations it would seem that the positive relation of language to reading begins rather late for our population (grade 7), and that the relation is primarily between word meanings and silent reading comprehension. The syntactic and metalinguistic aspects of language used in this study did not seem to be significantly related to the various reading measures. That syntax does not seem to relate to reading many stem from the low ceiling on the grammar and language awareness tests. Both seemed to ceiling at about grade 3.

Of the language means, word meaning seems to be the most potent component for reading. But this seems to begin at grade 7, at a level where the words in the reading matter go beyond the listening (receptive) vocabulary.

The relation between the reading and writing measures seems stronger than that between reading and language, although it is not very strong either. On the pretests, the writing measures of content and form have positive loadings on Factor 1, a strong reading and writing factor. On the posttest analysis writing appears with reading and word meanings on factor 2 (Table II) with a strong loading of rating of form.

The relation of writing to language seems stronger on the pretests--two factors were labelled language/writing and writing/language (Table I). On the posttests the relations were not as strong. Only on Factor 2 Word Precision (Table II) did a writing measure, form, load strongly, together with the language measures of word precision, and vocabulary score, and three measures of reading.

Summary and Implications: Reading, Writing and Language

Developmental Trends: Reading

Decelerating gains in reading were found as hypothesized for these low-income students (see chapter 1).

The same trends were found for the cross sectional and the longitudinal data. Generally, the students made the greatest gains between grades 2 to 4, declining in development from grade 4 to 6. Similarly, the gains from grade 3 to 5 were greater than from grades 5 to 7. The one-year gains also showed a similar developmental trend.

Thus the data for these low SES chil[illegible] appeared to confirm the findings from large surveys that there is a tendency to show a deceleration of growth on reading achievement tests at about the 4th grade (Coleman, 1966). The findings from the present study also tend to confirm hypotheses proposed in Chapter 1, that low SES children would tend to start to decelerate at a level in reading when it begins to be used for learning, and thus would require more extensive and advanced meaning vocabularies and background knowledge.

Status of Reading Achievement

At grade 2 (in May of the year) the children in this study achieved well on these tests--overall on expected norms.

The 4th graders tended to be on or above grade level on 3 out of 5 of these tests, and below on two.

The 6th graders, as a group, were substantially below grade level on all of the reading tests.

Thus the rates of progress and the levels of achievement in relation to national norms indicate that the children in the present study tend to make good progress in the early grades till about grades 4 or 5, and then begin to fall below national norms, and below their own previous earlier rate of progress. By grades 6 and 7, there is a visible loss of growth in achievement and their grade level scores are also substantially below national norms.

Are There Differences by Different Reading Components

The reading test used in the study permitted comparison of the development of the different reading and reading related components from grade 2 to grade 7.

Theoretically, the six reading components tested could be divided into those that put a stronger emphasis on word recognition, identification, and analysis (the word recognition, phonics, oral reading, and spelling tests) and those that put stronger emphasis on comprehension and word meaning (silent reading comprehension and word meaning). There are also other divisions for the six tests, such as those that put stronger emphasis on the use of context (oral reading, silent reading) and those that require stronger reliance on precision and decontextualization (word recognition, spelling, and word meaning.

Analyses of the development on the six reading tests by grade indicated the following:

There are differences in achievement by the different reading components. Scores on the word meaning test, the only scores that did not rely on the reading of print, were the first to decelerate. They were the first of the six scores to be "below grade," at grade 4, and were even more below expected grade level in grade 6.

The reading component that held up the longest was oral reading, with scores 3 months above expected grade levels in grade 7.

Correlation and Factor Analysis

To gain further insight into the interrelation of the reading components, we undertook various correlational studies and factor analyses. Overall the findings were similar to those found from the developmental trends.

The correlations tended to show strong relationships on the reading components that have a word recognition input, e.g. word recognition, phonics, spelling, oral reading. The word meaning scores, with a heavy input, correlate positively with silent reading comprehension, a test which also has a strong meaning input. Word meaning scores did not correlate significantly with any of the reading tests that have a strong word recognition input but at later levels, at 6 or 7th grade, it correlated positively with silent reading comprehension.

Thus the correlations indicated a differnce in association by kind of reading and by the level or stage of development. It appears from the correlations that the word recognition measures are important throughout grades 2 to 7 while the word meaning takes on importance in relating to the other reading tests particularly to reading comprehension in the 6th and 7th grades.

The factor analyses were run for the total sample and for the separate grades.

The results of the factor analyses tended to vary by the sample (whether for the total population or for the separate grades) and by the grade level of the sample.

When the entire sample was analyzed, only one factor was found--a general reading factor. The factor analyses by the separate grades did reveal more than one factor--for grades 4 and above. For grade 2, only one reading factor was found. The general trends in the factor analyses by increasing grades are the growing importance of word meaning and silent reading comprehension as well as phonics (needed to cope with increasingly difficult words). Another strong factor at the higher grades is composed of the various word recognition components (decontextualized and in context), e.g. word recognition, oral reading and spelling. These components tended to form most of the reading factor for the total population and for grade 2.

Differences by Above and Below Average Readers

For each grade (2, 4 and 6), about half of the pupils were selected as being above average in reading achievement on various screening tests and about half below. (The above average were at stanines 5 and 6, and those below were at stanines 3 or 4 on standardized achievement tests. These were confirmed by individual tests of oral reading and word analysis, and by judgment of the classroom teacher).

Comparisons of developmental trends by below or above average readers are of special interest. Overall, we found that the deceleration trend was especially strong for the below average readers. The above average readers seem to hold their achievement on most of the components even at 6th and 7th grades.

It would appear that the general deceleration by grade could be explained largely by the deceleration of the below average pupils. This raised the question whether the relative deceleration at the higher elementary grades is a phenomonen of social class or a phenomenon of lower ahcievement. Since lower SES students tend to be lower achievers, the observed tendency to decelerate after grade 4-5 may be a factor of their lower achievement rather than their social status. Indeed, the phenomenon of deceleration tends to characterize as well students with reading and learning disability, irrespective of social class. Their relative slow development in reading puts them even more behind in reading achievement when compared to test norms (Smith, 1970).

The above average readers in our sample, on the other hand, tended to achieve on grade level or above, and did not decelerate even by grade 6 or 7.

Relationship of Reading Scores to Writing and Language Measures

We present, here, just the broad findings of the relationships among reading, writing and langauge measures from the various analyses, particularly the developmental trends and factor analyses (The more detailed analyses are presented in Chapter 7)

The questions asked here were whether these various aspects of literacy and language are related. And, if so, how are they related and what could knowledge of this relationship mean for improving how we teach and stimulate these children.

The development trends of the cross sectional and the longitudinal scores are generally similar for most of the reading components, the measures of writing (whether holistic scores or trait scores) and language (whether vocabulary, grammar or language awareness (metalinguistic abilities)

Generally, they show an increase from grades 2/3 to 4/5; then a decline in the rate of increase from grades 4/5 to 6/7. The gain from pretest to post test scores (from grades 2/3 to 4/5 and 6/7) show the same kind of deceleration.

The above average and below average differences are also generally similar for reading, writing and language. At every grade the above average students score higher on reading, writing, and language then the below average. Thus in developmental trends, the language and literacy factors seem to be highly related.

The question of how they influence each other could not be answered by the trends study. For this we undertook a factor analysis of the reading scores, and selected scores from the writing and language measures. (See above for the tests and the details on the factors).

The factor analyses revealed the following:

Reading and writing appear to have a strong relationship--stronger than reading and language. The reading/writing relationship seems to be of a general nature with most of the reading measures, and two of the broad measures of writing (the ratings of content and form) loading significantly on the strongest factor.

The relationship of reading to language seems to be more subtle. None of the language measures loads on the strongest factors with reading. However, language does load on less potent factors. Where this occurs, it is vocabulary--the vocabulary score, the precision and sophistication of vocabulary, and the word meaning (one of the components of the reading test) that has a significant input. It is of interest that the other language measures--measures of grammar and measures of language awareness--did not load with the reading measures (word recognition, phonics, oral reading, silent reading, spelling).

Thus, it would appear that for these children, on those particular tests, language relates to reading primarily with regard to word meanings. That this relation is real for this study is found from the fact that the three measures of vocabulary--2 from the language tests and 1 from the reading--all load with the other reading measures--and particularly with silent reading comprehension. The analyses presented earlier--intercorrelations and factor analysis of reading tests, and developmental trends--further suggest that the influence of word meanings on reading is strong but it tends to come later--around grades 6 and 7.

Why word meaning should have a relatively late influence can be explained by research and theory in readability and comprehension. For reading beyond the beginning almost every factor analysis of reading comprehension has found that word meaning is the most important factor in reading comprehension. Readability research also finds vocabulary difficulty the strongest factor in the comprehension difficulty of text. Books at grade 6 begin to use words and ideas beyond the spoken and receptive language of the average students who use them. Before then, most words are known. Thus, the predictiveness of the vocabulary measures at about grades 6 and 7 and not earlier.

The relationship between writing and language was strong on the factor analyses. The language measures that loaded on the same factors as writing were of all 3 kinds--with greater emphasis on grammar and language awareness than on the vocabulary measures.

The Development of Language and Literacy

The picture one seems to get for the development of the language and literacy measures is as follows:

language growth seems to affect writing before it affects reading. From grade 2 on, it would appear from our assessments of the writing samples that the difficulties of our sample population are related to their difficulties with grammar and language awareness. Their relatively low scores in word meaning (on the reading tests) and on the two word meaning tests in the language battery seem to affect reading comprehension more than they do the other reading scores, and they influence reading comprehension relatively late.

Thus, it would appear that language development is an integral part of the full development of literacy. Yet, it might be well to consider when it is best to concentrate on what aspects of language. According to our findings, it would seem that early grammar and language awareness is important for writing, more perhaps than for reading. But how to develop the awareness in grammar and language probably needs the input that comes best from hearing more mature grammatical forms which come from being read to from children's books (see Chomsky, 1972). These books will also tend to contribute to the vocabulary development needed later.

Concern with word meanings is important, but when and how is it best done? The present research as well as a rich literature of theory and practice indicates that the middle and higher grades-when the new vocabulary becomes more abstract, literary, and technical, needs vocabulary work. There is considerable evidence in our data that it is important for reading comprehension to be able to define words in isolation with precision and exactness. Thus, the usual reliance on learning new words from context may have to be supplemented with more direct instruction.

Although language is important, it should not be overlooked that the strongest components in reading, for the below average, average, and above average groups in our population was strong abilities and precision in identifying words at increasing levels of difficulty--in context and in isolated and decontextualized form. To take attention away from these aspects of the reading programs currently practiced in these schools--is not indicated by our results. Thus the suggested addition of instruction in language and writing is not to be thought of as a substitution for the present program. It is an addition to a program that seems to be working well for most of the children

In sum, the low SES children in this study seem to be doing well in the early grades--grades 2 and 3--achieving on grade level norms. It is only in grades 6 and 7 (and the below average in grades 4 and 5) where the reading drops below the norms.

Thus, any attempts to improve their reading by adding features such as language, word meanings and writing should take special care not to drop instruction in those aspects which they have beentaught and which are essential for development, in the early grades and through grades 6 and 7.

Although the writing measures cannot be related to national norms, it would seem that the results show severe difficulties--many of which do not seem to improve with age and grade. Generally, the weakness seems to be more with form, i.e. grammar, sentence structure, and mechanics, rather than with content, e.g. nature of ideas.

It would appear, then, that earlier instruction and practice in writing is needed.

The below average groups need special attention for it is this group, not the above average children, that decelerated most in reading, writing and language scores. Since we did not assess the individual characteristics of these pupils (only their reading achievement on tests and teacher judgment, and observationsof the environment from the home and school) we do not know to what extent they may have other difficulties that may have affected their low achievement and slower development of language and literacy skills. The omission from the study of stanines 1 and 2 in order to eliminate children with learning disabilities may not have been sufficient. Indeed, a more complete study of the factors in the achievement of low income children would need to study those who might have some characteristics considered to be causes of learning disabilities.

Indeed, it may be the particular combination of such individual characteristics and the enviromental conditions in the home and school that may be influencing the low achievement.

Chapter 7
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Chapter 8: School Influences on Children's Literacy Development

Since we're interested in the relationship between schooling and an individual's literacy achievement, we looked at gains individual focal children made in four areas: word recognition, reading comprehension, word meaning, and writing. Chapters 6 and 7 describe achievement measures in detail, but for our purposes here we have developed gain scores in the four major areas: reading comprehension and word recognition, assessed by the Roswell-Chall silent reading and word recognition subtests, word meaning, assessed by the WISC-R vocabulary subtest, and writing, assessed by expository and narrative writing samples. We hypothesize that growth in these four literacy areas should be related to aspects of school experience discussed in Chapters 4 and 5. Since tests in these areas were administered in the spring of 1981 and again at the end of the second year, in 1982, gain scores should be sensitive to differences in the children's school experiences in the second year of the study when they were third, fifth, and seventh graders. The sections that follow relate gain scores in each of the four areas to the literacy materials used in children's classrooms, to the types of reading, vocabulary and writing instruction they received and to relationships between the children's homes and the schools.

Factors Related to Reading Comprehension

For reading comprehension we used two gain measures: 1) whether the child gained the expected year on the Roswell-Chall silent reading subtest* between May 1981 and May 1982 and 2) a more differentiated measure indicating a) 0 to .9 year gain, b) 1.0 to 1.9 years, c) 2.0 to 4.1 years or d) a ceiling score on this subtest, namely an 8th grade criterion score on the second year's test.

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*The Roswell-Chall silent reading subtests described in full in Chapter 6 were rescored for purposes of developing gain scores. Students were given credit in whole grade scores for the highest level of the test on which they reached criterion, i.e., 3 out of 4 correct. Partial credit was given for every correct response on the next highest level of the subtest.

Materials

There was a wide variation in the number and type of materials used for reading in the classrooms in our study. For example, some teachers used only a basal reader and its accompanying workbook while others used language experience stories, teacher-made worksheets, trade books, etc. Our data on materials comes from two sources: teacher reports on end-of-the-year questionnaires and observers' ethnographic notes on classroom visits. The materials that teachers reported using in reading lessons were a factor which had strong associations with gains in reading comprehension. Children whose teacher reported using five or more different types of materials in reading lessons were somewhat more likely ($\chi^2 = 2.8, p < .10$) to gain a year or more in reading comprehension than children whose teacher reported using four or fewer types of materials. The children who made considerable gains -- two years or more -- in reading comprehension were also more likely to be in classes where the teacher reported using a greater variety of types of materials. Twenty-nine percent of the children whose teacher said she used four or more types of materials gained two years or more, whereas only 8% of children whose teachers used three or fewer types gained this much.

Use of comprehension workbooks in reading lessons -- a common practice in classrooms in our study -- made no difference in children's reading comprehension gains, however. Although use of basal readers did not make a difference in comprehension gains, the level of difficulty of the basal text in relation to the child's reading level on standardized tests did. All children using a text similar to their measured reading level or a more difficult one gained at least a year in comprehension; only half of those who used a text at least a full grade level easier did so.

Use of trade books -- materials other than controlled-vocabulary texts and workbooks was also related to gains in reading comprehension. Eighty-five percent of the children whose teacher said she used trade books in reading lessons gained at least a year compared to 60% of those whose teacher said she did not. Children making considerable gains in reading comprehension -- gains of two years or more -- were also more likely to be those who had trade books as part of their reading program (Kendall's Tau B = .27731, $p = .05$). Use of trade books outside of reading lessons was also associated with better than expected gains in reading comprehension. One measure we have of this is whether or not teachers assigned book reports. Eighty percent of the children who wrote book reports, according to their teacher, improved two years or more or received the highest possible score on the test; only 46% of the children who didn't write book reports gained this much.

Another measure of children's exposure to books outside of reading lessons is the amount of school-sponsored use of libraries. There was considerable variation between classrooms in the number of trips they made to the library -- from 0 to 36 in the course of the second year of the study. Number of visits to the library was significantly related to gains in reading comprehension (Kendall's Tau B = .32998, $p < .05$). Eighty-eight percent of the children who visited twice a month or more gained at least a year, as compared to only 54% of those who went once a month of less. As we discussed in Chapter 4, budget cuts in the Norwich schools reduced the number of classes served by library specialists. The second year of our study, a higher proportion of children who were still served by a library specialist gained at least a year in comprehension (87.5% compared to 65%).

In summary, children in our study who had exposure to a variety of materials especially trade books rather than just basal series and workbooks, were more likely to both keep pace with national norms -- gaining at least the expected year between May of 1981 and 1982 and to make considerable gains, two years or more in reading comprehension.

Instruction

Reading group assignment and the amount of time scheduled for each reading group -- classroom practices in which there was a lot of variation -- also were related to gains in reading comprehension. Half of the children assigned to top reading groups gained two years or more on the Roswell-Chall reading comprehension subtest or achieved a maximum score; only 29% of those assigned to middle groups and 25% of those assigned to bottom groups made this much gain. However, children who were moved to a higher reading groups in the course of the year made no greater gains in reading comprehension that those who stayed in the same group.

While the amount of time spent in reading group (according to teacher interview responses) had no relationship to whether children gained the expected year in comprehension or not, children who had more scheduled time in reading group were more likely to make considerable gains. Eighty percent of the children who spent 160 minutes or more a week in reading group gained two years or more or achieved a maximum score on the reading comprehension test. Only 43% of the children who teachers said spent 150 minutes or less a week in reading group and only 28% of those whose reading group was scheduled for variable amounts of time made these superior gains.

One would expect that children whose teacher emphasized comprehension would be more likely to make comprehension gains than those whose teacher did not. We have three indicators of comprehension emphasis: 1) whether on the questionnaire teachers checked comprehension in a list of skills emphasized for their class, 2) whether on the questionnaire again they mentioned comprehension as a focus for an individual child's instruction, and 3) whether observers saw teachers explain or demonstrate a comprehension strategy during reading group. There was no relationship between teachers' checking comprehension as an emphasis for the whole class and focal children's gains in comprehension. However, children whose teacher mentioned comprehension as an instructional focus for the child's own reading group were morelikely to gain on the Roswell-Chall subtest than children whose teacher cited no focus or some other focus for their reading group. All of the focal children who were in reading groups where observers saw a comprehension strategy being explained gained a year or more but only 68% of focal children in groups where this was not observed gained the expected year.

Another skills emphasis for reading instruction on the teachers' checklist was "critical thinking or reasoning." Children whose teacher checked this emphasis were more likely to gain a year or more in comprehension than those whose teacher did not (81% versus 53%). Children who, according to teacher report, wrote in class more frequently -- twice a week or more -- were also somewhat more likely to gain, suggesting that other language arts activities in the classroom can contribute to reading comprehension.

Two observers rated each classroom on quality of instruction and quality of literacy environment, based on ethnographic field notes including classroom as opposed to just texts and workbooks, an emphasis on critical thinking and reasoning, more frequent in-class wirting, assignment of book reports can be thought of as constituting a "broad definition of literacy" factor. A second group of features: high observer ratings for "instruction," more time spent on reading group, actual explanation of comprehension strategies in reading class, and perhaps family contacts as well, can be thought of as a "thoroughness of instruction" factor. These factors were not necessarily present in the same classrooms but each was associated with better-than expected results for our group of low-income children.

Word Recognition

To measure gains in word recognition we used 1) whether the child gained the expected year on the Roswell-Chall word recognition subtest between May 1981 and May 1982 and 2) whether the child gained a) less than a year, b) 1.0 - 1.5 years, c) 1.6 - 2.0 years, or d) 2.0 - 4.1 years.

Materials

Neither the number of types of materials used in reading instruction nor the use of trade books was related to gains in word recognition, as it was to reading comprehension. Writing book reports -- a practice that accompanied superior gains in comprehension -- and the use of phonics workbooks -- a practice assumed to benefit word recognition -- also did not differentiate children who gained in word recognition from those who did not.

What did make a difference for gains in word recognition was using a reading text with a controlled vocabulary at a level similar to or higher than the child's tested reading level. Only half the children who used a reading text at least a full grade level easier than their tested reading level gained a year or more in word recognition, whereas all the children using a basal text of a similar or harder level* gained this much. Moreover, all of these children using a controlled vocabulary text similar to or harder than their tested reading level made superior gains -- more than 1.5 years in word recognition. Children who did not use readers with a controlled vocabulary were less likely to gain in word recognition than those who did. Ninety percent of the children who used basal readers gained a year or more; only 60% of those who didn't use basals gained at least a year on the word recognition subtest. We hypothesize that basal readers were effective in promoting word recognition gains because these reading texts systematically introduce new words and provide repeated exposure to them. In the absence of much direct teacher help on word attack-and this occurred in only 13% of the classroom reading lessons we observed - basals, provided they are difficult enough relative to children's reading levels, may fill the gap.

While use of tradebooks in reading lessons was not associated with superior gains in word recognition, exposure to trade books outside of reading class was. Children whose classes made any visits to the library at all were more likely to gain in word recognition than those making no visits. We hypothesize that teachers who never took their classes to the libary may have valued literacy less or may simply have been less well organized. Teachers who managed to get their classes to the library in spite of budget cutbacks for aides and library specialists may well have been more systematic about teaching word recognition as well. Since there was no relationship between the number of library visits and gains for word recognition (as there was for comprehension) we feel that library visits may be an only indirect factor for word recognition development. Exposure to tradebooks -- through use of varied materials in reading lessons and through frequent use of the library -- though important for improving children's comprehension, had little relationship to their gains in word recognition.

maps, literacy materials checklists and narratives of reading and content area lessons. As the table below demonstrates, there was a tendency for children in classrooms with higher ratings in instruction and in literacy environment to make greater gains in reading comprehension.

Instruction		Percentage of focal children gaining at least one year
positive:	teacher regularly gives explanations, develops concepts; children have routines, classroom is orderly without being tense. May include open classroom or traditional format. Most children seem challenged or involved.	87.5%
neutral:	teacher sometimes gives explanations, develops concepts; children lack stimulating activities; some routines in classroom.	70%
negative:	teacher rarely gives explanations or develops concepts; chaotic and/or rigid; heavy emphasis on discipline (not always effective); many children seem bored or alienated.	60%

(Kendall's Tau B = .22553, $p < .10$)

Literacy Environment		
enriched:	varied reading materials; frequent library visits; stimulating activities; frequent creative and expository writing assignments; teacher asks many inferential questions of students; physical environment includes resources beyond texts; displays of student work.	100%
average:	standard instruction, following a basal text. Some variety in reading materials; some library visits; some writing assignments.	71.4%
impoverished:	lack of variety in reading materials; infrequent library visits; teacher does not organize reading activities appropriate to children's reading level; physical environment bleak and largely limited to texts; lacks displays of student work.	60%

(Kendall's Tau B = .24702, $p < .10$)

In summary, spending more time in reading group, having comprehension or critical thinking as a focus for instruction, having a teacher who demonstrated comprehension strategies, and writing more frequently in class all contributed to gains in focal children's reading comprehension.

Teacher Expectations and Family Contacts

As we discuss in Chapter 5, there was considerable variation in the degree to which teachers were involved with the children's families, in teacher estimates of the families' contributions and expectations for the children's further schooling. Several types of teacher judgments of the families and contacts with them were related to children's gains in reading comprehension.

Children whose families in teacher estimates had contributed positively to their school success, were more likely to gain at least a year in reading comprehension. Eighty percent of these children gained at least the expected year, compared to only 50% of those whose families had made no contribution or a negative one, in the teacher's report on our questionnaire. If the teacher also mentioned the home as a factor in children's reading achievement, these children were similarly more likely to gain at least a year. Neither of these teacher judgments however differentiates the children who gained just a year from those making greater gains. Teacher's expectations for focal children's final educational level were significantly related (Kendall's Tau B = .25270, $p < .05$) to the amount children gained on the Roswell-Chall reading comprehension subtest.

There are two ways of interpreting these three relationships. Teachers could be responding to real differences in childrens'achievement by having higher expectations and better opinions of the family contribution for children whose skills are improving more. Alternatively, teachers' judgments and expectations could be affecting children's achievement through some kind of differential treatment. Evidence for the existence of at least one kind of differential treatment and its relationship to reading comprehension can be found in our data on teacher contacts with the families. Teachers were more likely to contact below average readers' families about academic problems and above average readers' families about behavior problems. Although our below average readers as a group were less likely to gain a year in comprehension, children whose families were contacted about academic concerns were more likely to gain substantially. All of the children whose families were contacted about academic matters gained two years or more or achieved a ceiling score on the Roswell-Chall. Only half of the children whose families were contacted about behavior problems and only 35% of those whose families were never contacted did this well. Teachers might have been more likely to contact families that they thought of more positively and to contact them about academic concerns. Or these contacts may be a manifestation of greater teacher concern in general; teachers who make more contacts with families and make them about academic matters may be doing a more conscientious job in the classroom as well. On the other hand, teacher-initiated contacts about academic problems may elicit family support and help which has an independent effect on the child's reading achievement.

To summarize, gains in reading comprehension among our group of focal children were related to a variety of school factors, among them the materials used, the organization of instruction and the teacher's academic contacts with the family. A number of classroom features: the use of tradebooks in reading class

Instruction

Shifts in reading group assignment and amount of time scheduled for reading group were both related to gains in word recognition. All of the children who were moved to a higher reading group in the course of the year improved in word recognition; only 77.8% of the children whose ability group assignment remained unchanged gained. The direction of influence is not clear: Teachers may have simply moved children because their word recognition skills were already improving at a faster rate than others in their group. On the other hand, being moved to a higher reading group gave some children exposure to materials with more difficult vocabulary.

As with comprehension, substantial gains in word recognition were more common among children who had longer and/or more frequent reading periods. None of the children with fewer than 150 minutes per week of instruction, according to teacher responses on the interview, gained two years or more; a third of the children with a reported 150 minutes a week and half of the children who spent 160 minutes or more gained this much (Kendall's Tau B = .32370, p = .02).

Two features of reading lessons noted during our observations had a positive relationship to gains in word recognition. Children in reading groups where we observed more than minimal amounts of oral reading from texts and where the teacher gave word attack strategies while we were present were somewhat more likely to gain the expected year on the Roswell-Chall word recognition subtest. As we report in Chapter 4, getting word attack strategies during reading lessons and opportunities for oral reading were more common for the younger children in our study than for the seventh grade group. And, as we report in Chapter 6, the older students as a group were less likely to gain at least a year in word recognition. Thus, the relationship between these factors more common among the younger students may be simply a case of co-occurrence rather than causality.

There was an interesting relationship between children's gains in word recognition and the skills teachers said they emphasized. Surprisingly, children in classes where teachers reported emphasizing phonics or structural analysis made no greater gains than children in classes where these skills weren't supposedly emphasized. However, in classes with an emphasis on vocabulary (according to teacher reports) children made significantly greater gains in word recognition ($\chi^2 = 13.597$, 4 d.f., $p < .01$). Virtually all the children in our sample are reading at levels where words that are difficult for them to recognize are not in their speaking vocabularies. When children encounter the kind of words that appear on the more difficult levels of the Roswell-Chall, knowing the phonic principles taught in the primary grades isn't enough; they have to have heard the words before to know how to pronounce them. Thus, emphasizing word meaning may be more relevant to improving word recognition for children at these levels than emphasizing phonics or structural analysis is. Further support for this relationship between vocabulary development and growth in word recognition is presented in Chapter 9; some of the same home factors that were associated higher WISC-R vocabulary test scores were also associated with higher Roswell-Chall word recognition test scores. See also Chapter 6 for intercorrelations and factor analyses of reading tests which support this relationship.

A number of classroom characteristics that were positively associated with gains in reading comprehension were negatively related to word recognition gains. Children were less likely to gain in word recognition if their teachers mentioned emphasizing critical thinking in reading instruction or assigning creative writing. Frequency of classroom writing (from teacher report) was negatively related to children's word recognition gains (Kendall's Tau B = .29198, $p = .03$), as were observers' ratings of the classrooms as literacy environments. Although a teacher can do a good job of both teaching word recognition and fostering comprehension (in fact, this was the case for two of the second grade classes in the first year of our study; see Koch and Hemphill, 1982), few of the teachers the second year did so consistently. One group of teachers in our study used tradebooks rather than basal readers, emphasized composition, and tended to get high ratings on their literacy environment, but did little direct teaching of word recognition. Children who had these teachers showed greater gains in comprehension than in word recognition. Another group of teachers gave systematic instruction in word recognition and vocabulary but their literacy materials were limited to basals and workbooks. Focal children in this kind of classroom tended to improve more in word recognition than in comprehension. Of course not all teachers fell into one or the other of these groups, but some of the negative relationships given above can be explained by the fact that many teachers were effective at either fostering comprehension or word recognition but not both.

Home and School

Some of the same teacher judgments that were related to gains in comprehension were also associated with word recognition gains. However, whether teachers initiated contacts and what the contacts were about -- factors powerfully associated with children's gains in comprehension -- bore no relation to word recognition gains.

Children whose teachers mentioned the home as a factor in their reading achievement were more likely to gain at least a year in word recognition compared to children whose home was not mentioned (80% versus 57%). While teacher's ratings of family contributions to focal children's school success were not related to whether these children gained in word recognition, none of the children whose teachers rated the family negatively made gains of two years or more. There was also a relationship between the teachers' educational expectations for the child and whether the child gained a year or more in word recognition. Only half of the children who teachers expected to complete only some high school gained, but 70% of the children who were expected to finish high school and 100% of those who were expected to graduate from college gained at least a year.

Gains in word recognition among our focal children were related to a distinct and somewhat different group of school factors from the ones already described for comprehension. In particular the "broad definition of literacy" factor seems less important for word recognition since neither number or types of materials used in reading group, assignment of book reports, amount of creative writing or emphasis on critical thinking or reasoning was associated with word recognition gains. The "thoroughness of instruction" factor, seems to operate for word recognition as well as for comprehension. More time in reading class and actual teacher explanations of word attack strategies were significantly related to word recognition gains for our focal group. The most interesting finding relevant to word recognition is that traditional strategies for fostering growth in this area -- measured by teacher responses to our questions about phonics and structural analysis emphases and about use of phonics workbooks -- were not associated with gains. The strongest relationship for any single factor and word recognition growth was teacher's report of a vocabulary emphasis in reading instruction. Exposure to new words, rather than phonics instruction, was associated with gains in word recognition for focal children.

Factors Related to Word Meaning

Although the WISC-R vocabulary test is generally thought of as an ability test, it functioned for the children in our sample as an achievement test: Scores for individuals shifted by as many as fifty points (when scores are converted to estimated IQ scores) between May of 1981 and May of 1982. Some children's scores rose, relative to their chronological age, while others' fell in this same one year period.

Materials

The classroom factor most strongly related to gains on the vocabulary subtest of the WISC-R was the materials used for reading instruction. Teachers' mention of tradebooks as part of the reading program, the difficulty level of the basal reader (if one was used), and the use of materials other than basal texts and workbooks in reading lessons observed -- all were associated with gains in vocabulary scores. Use of tradebooks (according to teacher report) was related to extreme gain scores; only children whose teacher said she used tradebooks in reading lessons gain~~s~~ed 40 points or more; only those whose teacher didn't lost 20 or more points ($\chi^2 = 6.088$, 2 d.f., $p < .05$). The children who used a basal reader that was at least a grade level easier than their tested reading ability lost an average of 10 points in vocabulary. Only one child had a text at least a grade level harder and that child gained 50 points. (Those using basals similar to their reading level gained an average of 1.43 points.) Observers noted whether materials other than basals or workbooks were used duirng each focal child's reading period. Children whose teacher actually used these other materials while observers were present -- tradebooks, language experience charts, teacher-written stories and worksheets -- were much more likely to show gains on the WISC-R vocabulary subtest (Kendall's Tau B = .36765, p = .01).

Instruction

Explicit vocabulary teaching during reading lessons, at least ones we observed, was not related to gains on the WISC-R vocabulary subtest. Children in classes where observers noted explicit vocabulary instruction taking place were no more likely to gain than children in classes where observers sas no vocabulary teaching. Incidental development of word meanings in reading lessons, for example, one teacher's discussion of "leftovers," was similarly unrelated to vocabulary gains.

On the other hand, observers' ratings of the quality of instruction and the classroom environment for literacy were associated with children's gains on the WISC-R word meaning subtest. Classrooms with a positive instruction rating were ones in which children seemed challenged and involved and teachers regularly gave explanations and developed concepts. Focal children in these classrooms were more likely to gain on the WISC-R subtest ($\chi^2 = 5.647$, 2 d.f., $p = .06$) than those in classes with neutral or negative ratings for instruction. Observer ratings of the literacy environment were even more strongly related to vocabulary gains: All of the focal children in classrooms with positive literacy environment ratings gained compared to only half of those in rooms with a negative rating ($\chi^2 = 8.180$, 2 d.f., $p < .02$). Varied reading materials, frequent library visits, teacher questions requiring students to draw inferences, frequent writing assignments were all included in observers' positive rating of the classroom literacy environment.

Teacher reports of frequency of in-class writing on the questionnaire were related to extreme scores on the vocabulary subtest. The only children who gained 40 or 50 points had writing in class at least once a week. No child who wrote in class at least once a week lost more than 10 points, whereas 30% of children who wrote less frequently lost more than 10 points. The type of writing that focal children did in class was also related to gains on the WISC-R. Children in classes where teachers reported assigning creative writing were more likely to gain in vocabulary, especially 20 points or more, than children in classes where creative writing was not assigned ($\chi^2 = 6.17$, $p < .05$).

Another factor in children's school experience related to gains on the WISC-R vocabulary subtest was the number of types of field trips they took. None of the focal children whose class took three or more types of field trips scored lower on the WISC-R vocabulary than he or she had the year before, but 30% of the children whose class took two types or fewer did. Sixty percent of the focal children who went on three or more different kinds of field trips showed a gain in vocabulary; but only 39% of the children who had fewer types of field trips gained. (see Chapter 9 for more findings on "outings" and vocabulary growth).

It seems surprising that vocabulary instruction in reading lessons had no relation to children's gains in vocabulary on the WISC-R. The descriptions of reading lessons in Chapter 4 give some indication of why this might be so. Words chosen for discussion were often ones already in the children's speaking vocabulary; for example, the discussion of the word "leftovers" and "dough" described in Chapter 4 for a third grade class. Moreover what teachers did to develop meanings was often limited to having the children copy definitions (for example in Chapter 4's description of Mr. Barasch's sixth grade reading lesson.

The observers' instruction rating, on the other hand, which judges how challenging lessons were and how thoroughly teachers developed concepts did have a relationship to focal children's vocabulary gains. This instruction rating may be a better indicator of the effectiveness of vocabulary instruction in the classroom.

Schools present children with other less formal opportunities for learning new words. Some of these other occasions for vocabulary development were even more important for our focal children's gains on the WISC-R subtest than explicit instruction was. Being exposed to new experiences through field trips or getting practice using words in classroom writing were both associated with better than expected results on the WISC-R vocabulary subtest. Observer ratings of the classrooms as environments for literacy had the strongest relationship to WISC gains of any school factor. The description of Ms. Pasquale's class in chapter 4 illustrates the diverse opportunities for learning new words present in a rich classroom environment.

Home and School

The home and school factors that were strongly related to gains in comprehension -- teachers' contacts with families, their judgments of families' contribution to focal children's school success -- had no relationship to whether children gained or not on the WISC-R vocabulary subtest. Surprisingly teachers' educational expectations for focal children had a negative relationship to vocabulary gains. Unlike in reading, where teachers may have consciously provided superior instruction for those who they expected to go farther, children who were seen as less competent -- those not expected to graduate from high school -- may have gotten more exposure to new words because they were seen as needing more help in this area.

In addition, below-average readers were more likely as a group to make gains on the WISC-R subtest (see Chapter 7). Since these are the children for whom teachers' educational expectations were lowest, the usual pattern of association between expectations and gains was broken here.

One group of children in our study -- those of foreign-born parents -- were less likely to lose ground on the WISC-R vocabulary subtest than children of U.S.-born parents. None of the non-native children's scores dropped, but 36% of the children whose parents were native-born had scores that showed a decline relative to their chronological age.

Gains in word meaning, as measured by the WISC-R vocabulary subtest, were related to some of the same factors we call a "broad definition of literacy." Factors which were associated with better-than-expected gains in reading comprehension -- high observer ratings for the classroom as a literacy environment, teacher's use of materials other than basals or workbooks in reading lessons, assignment of creating writing -- were even more strongly associated with word meaning gains. As with word recognition and reading comprehension, the conventional classroom approach to fostering growth in this area -- explicit vocabulary teaching -- showed no relationship to measured gains.

Factors Related to Writing

As discussed in chapter 7, focal children were asked to produce both expository and narrative writing samples at the end of the first year of the study in May 1981 and again in May 1982. Each year these samples from our group of children were holistically rated from 1 to 4 relative to each other, rather than against an absolute standard, by three independent raters and raters' scores for each child were averaged. When each child's first year score was subtracted from the second year's, individual gains ranged from -1.5 to +1.5. To relate classroom factors to children's writing abilities, we developed four measures of gains for individuals indicating the improvement in a child's writing from the first year to the second year of the study. Two measures of improvement in writing were increases in holistic rating from one year to the next on the narrative and on the expository samples. Two additional gain measures were increase in number of words written (as a proportion of an individual's original samples) in response to the narrative and expository stimuli. These production gain measures are included here because they correlate highly with both writing content and holistic ratings and are associated with home factors discussed in Chapter 9.

We hypothesize that these gain measures in writing reflect factors in the children's school experience in the second year of the study and the continuing influence of out-of-school factors as well. The sections that follow relate the four gain measures to information from the mother, child, and teacher interviews and to observer ratings of the second year classrooms.

Attitude Toward Writing

We found relationships between the children's attitudes toward writing as indicated by responses on both child and maternal interviews and changes in their writing from one year to the next. There were associations between a child responding during the inverview in the first year of the study that he or she "liked to write" or "wrote for fun" and gains on all four measures of writing. Eighty percent of focal children who reported liking to write increased in production on the expository sample whereas only 33% of those who said they didn't like to write gained in expository production ($\chi^2 = 5.23$, $p < .05$). There were similar but weaker associations between liking to write and production gain on the narrative passage (75% versus 42%) and with gain in holistic rating on the narrative passage (76% versus 50%). Sixty percent of the children who said they didn't write for fun wrote poorer quality narrative and expository samples the second year, compared to only 33% of children who did write for fun.

Based on information from the maternal interview as well, focal children who liked to write (this time according to their mother's report) were somewhat more likely to gain in quality on the narrative and on the expository ratings. None of the five children who were said by their mother not to like writing gained more than .6 points in narrative holistic rating from one year to the next, while 41% of those who were said to enjoy writing gained that much or more. There was a similar pattern of association with liking to write and improvement in raters' judgment of improvement in the quality of expository passages produced across the two years.

Writing Experiences at Home

Limited access to writing materials at home as reported by children's mothers was related to lack of growth in writing for these children across the years of our study. Virtually every child lived in a household where there were some writing materials, but three children lacked materials of their own. These three children wrote shorter narrative passages in the second year of the study than they had in the first ($\chi^2 = 7.09$, $p < .01$), and two of the three children who, according to the mother's report, lacked writing materials actually decreased in production on the expository sample (only 20% of the children who had their own materials wrote fewer words the second year. None of these children who lacked materials of their own showed gains of .6 points or more in narrative holistic rating at the end of the second year of the study, but 32% of the children who had their own writing materials at home gained this much.

Children and their mothers were also asked how frequently they engaged in a range of writing activities at home. There was no relationship between the reported frequency of the child's writing at home and any measures of growth in writing across the two years. Nor was there much association between the nature of children's writing experiences at home and gains on writing measures. The only exception was a greater increase in expository production among children who said they wrote letters at home. But children who, according to both mother and child reports, wrote "messages", "notes to friends", "shopping lists", and "diaries or stories" showed no more growth on any of our writing measures than children who did not engage in these activities at home.

Although there was considerable variation in children's writing activities out of school, this variation was not reflected in differential patterns of gains on measures of children's writing. Children's attitude toward writing, on the other hand, was related to gains from one year to the next. Chapter 9 presents similar results confirming the conclusion that attitude, and emotional factors more generally, showed a greater relationship to writing status than any measures of home writing experience we collected.

Writing Experiences at School

Teachers of our focal children in the second year of the study were asked to estimate the frequency of in-class writing and to describe the writing assignments they gave their classes. Frequency of in-class writing was related to gains on the narrative passage from one year to the next in quality ratings. Comparing children who did class-sponsored writing once a week or more often to those writing less frequently, the children with more in-class writing experience were more likely to gain and less likely to lose in holistic ratings of the quality of their narrative passages ($\chi^2 = 4.51$, $p < .05$). However, there was no clear relationship between frequency of in-class writing and gains on the other three writing measures.

The types of writing teachers assigned bore a greater relationship to improvement on our writing measures than the frequency with which they assigned did. For example, children whose teachers said they assigned "creative" writing were more likely to write longer narrative passages in the second year of our study than they had the preceding year ($\chi^2 = 3.91$, $p < .05$). Children whose teachers reported assigning creative writing were somewhat more likely to increase in production on the expository sample, as well. Experience with creative writing also affected quality ratings: half of the children who did creative writing in class gained .6 or more on ratings of their narrative passages across the two years, but only 21% of the children whose teacher did not mention assigning creative writing did this well. Children whose teacher metnioned assigning research reports were also somewhat more likely to improve in ratings on the narrative passage the second year compared to children whose teacher didn't assign these reports ($\chi^2 = 4.88$, $p < .10$).

There was no relationship, on the other hand, between teachers' mention of assigning any other single type of writing -- essays, projects, journals, stories or book reports -- and focal children's improvement on any of our writing measures from the first to the second year of the study. However, children whose teacher described assigning sentences and paragraphs -- very limited types of writing -- showed less gain on several writing measures than focal children who did only more challenging types of writing. For example, 58% of the children who didn't write paragraphs in class wrote expository passages in the second year of the study that were at least twice as long as the ones they'd written the first year; only 14% of the children whose teacher assigned paragraph writing showed this much gain in word production ($\chi^2 = 5.53$, $p < .05$). Children whose teacher reported assigning paragraph writing were also less likely to write longer narrative passages the second year of the study ($\chi^2 = 3.91$, $p < .05$). In ratings of the quality of the narrative passage from one year to the next, 83% of children who didn't get assigned writing showed improvement, but only 56% of children who were assigned paragraph writing improves. Children whose teachers mentioned assigning "sentences" showed similar, though statistically weaker, patterns of less writing improvement compared to children whose teachers didn't give sentence writing assignments.

In chapter 4 we contrasted composing with "quasi-writing" activities such as filling in the blanks and circling answers in workbooks. Teachers were asked which of several types of homework assignments they gave, among them, workbook and writing assignments. Focal children whose homework included writing assignments were more likely to improve in holistic ratings of their second year's expository passage: 70% of them did, compared to only 33% of those who weren't assigned writing homework. Similarly, children who had writing homework were more likely to receive holistic ratings .6 points or more higher than in the previous year on narrative passages; 45% of those who were assigned writing homework gained this much, but none of those who had no writing homework did. Additionally, 80% of focal children whose teacher assigned writing homework wrote longer expository passages the second year than they had the first, while only 50% of the children who didn't get writing homework did. In contrast to writing homework, workbook homework, given by 17 focal children's teachers, involved the students in quasi-writing rather than composing. Having workbook homework was negatively related to gains in quality ratings of narrative passages: Only 58% of the children who had workbook homework gained from one year to the next, but 88% of children who did not have this limited kind of writing as homework improved.

Classroom Ratings

Children in classrooms which were given positive instruction ratings by observers -- those in which teachers gave explanations and developed concepts and children were challenged and involved -- were more likely to gain at least .6 point on the averaged holistic rating of their expository sample than were children in classrooms which observers rated as negative or neutral in instruction (χ^2 = 4.64, $p < .05$). However, observers' instructional ratings of the classrooms were not related to children's gains in holistic rating of their narrative writing. There were associations, on the other hand, between ratings of classroom instruction and gains in the length of both the expository (χ^2 = 4.35, $p < .05$) and the narrative passages produced. Only ten percent of focal children whose classroom was rated "negative" in instruction wrote narrative passages the second year of the study that were twice the length of the ones they'd written the previous year. However 30% of those whose classroom received a neutral rating, and 50% of those whose room received a positive rating did.

Observers' ratings of the literacy environment of the classrooms -- enriched, average, impoverished -- and of the emotional climate of the classrooms were not significantly related to children's gains in holistic ratings on either the expository or the narrative sample ar to either gains in number of words produced on either passage.

Summary

In summary, the child's own enjoyment of writing was the only factor related to gains on all four of writing measures. A complex of other factors which can be thought of as indicators of exposure to writing -- the child having his or her own writing materials, doing creative writing in class, not doing simply paragraph writing, and having writing homework -- all were associated with increases in length of both the narrative and expository passages children produced from one year to the next. Having a teacher with high standards, a factor indicated by the instruction ratings, was also associated with production gains. Gains in the quality of the narrative passages produced were related to these same factors plus three additional ones -- doing in-class writing once a week or more, writing research reports, and not having workbook homework. Gains in the quality of expository passages were related to only two factors -- having writing homework and being in a classroom with a teacher who received a high observers' rating for instruction. Having a teacher who gave good explanations and developed concepts or being asked to do these things in writing homework bore the clearest relationship to improvement in the quality of children's expository writing and high standards.

Conclusion

Table 8-1 summarizes the factors we found to be positively associated with individual children's gains in reading comprehension, word recognition, word meaning, and writing. It is clear from this table that materials, classroom instruction, and family contact are all important factors in children's literacy development. Different factors are associated with gains in different areas of literacy, but some factors are related to growth in more than one area.

We conclude that schools and classrooms do make a difference for children's growth in literacy skills, though it is also apparent that school experiences -- negative or positive -- make more difference for some children's gains than others. The important role of home factors is discussed in the chapter that follows.

Table 8-1. School Factors and Achievement

Gains in:	Materials	Instruction	Home and School	Observer Ratings
Reading comprehension	variety, [illegible] especially trade books; number of library trips	more time in reading group; comprehension or critical thinking as a focus of instruction; teacher demonstrates comprehension strategies; frequent in-class writing; book reports	teacher sees family as contributing to school success and as a factor in reading achievement; teacher has high expectations for child's education; teacher makes more contacts with family and makes academic contacts	high literacy environment rating; positive instruction rating
Word recognition	using basals similar to or harder than tested reading level; library visits	more time in reading group; teacher demonstrates word attack strategies; vocabulary emphasis	teacher mentions home as factor in child's reading achievement and has high expectations for child's education	positive instruction rating
Word meaning	use of trade books and other materials besides texts and workbooks; using basals similar to or harder than tested reading level	frequent in-class writing; creative writing; field trips		high literacy environment; positive instruction rating
Writing	child's own writing materials at home	frequent in-class writing; creative writing; research reports		positive instruction rating

References

Koch, Jean and Hemphill, Lowry. "Second grade classroom contrasts." Paper presented at the International Reading Association Convention, Chicago, March 1982.

Chapter 9: Family Influences on Children's Literacy

There are a number of dimensions of children's family and out-of-school life which might be hypothesized to contribute significantly to their acquisition of reading and related skills. The one which has received the most attention in studies of home influence on reading achievement has been the degree of literacy in the family, as evidenced by such variables as number of books in the home and length of time spent reading. Two other dimensions which many studies have suggested are highly predictive of children's school success are: a) parental educational level, presumably because parents with more education provide a more stimulating home environment and are better able to help children with school-related problems, and b) family constellation and background, such as number of children and their birth order, and whether it is a single- or two-parent household.

Our study was designed to test the impact of familiar variables such as those mentioned above within a low-income population, where social class does not co-vary with the variables of interest, but also to go beyond these variables and assess the role of several other dimensions of family life as well. Such dimensions include the family's perception of and aspirations for its children; the degree to which the children and mothers had contacts outside the household with extended family, friends, community groups, and other institutions, and the degree to which non-school activities were available to the children; the level of organization and emotional climate of the family's life, as indicated by the physical surroundings they create and by their use of schedules and plans, by their reliability in keeping appointments and getting their children to school, and by a sense of predictability in their lives; and the degree of stress (financial and otherwise) being experienced by the family.

In Chapter 3 we gave some sense of the variability of the families on these dimensions. In this chapter, we will discuss how each of these dimensions relates to children's literacy achievements. First, we will assess their relationships to our initial classification of the children into above- and below-average readers. Then we will look at them in relation to the children's performances on various subtests of the [illegible] and language battery, in order to determine whether the several home factors influence the various literacy skills differentially. Finally, in the last section of this chapter, we will construct a number of models of interaction among the various dimensions and test them using regression analysis.

The literacy subtests examined were (a) the Word Recognition Subtest of the Roswell-Chall, because it reflects the reading skills most relevant to second and third graders and because it might best reflect the parents' direct teaching and literacy provision, (b) the Silent Reading Subtest of the Roswell-Chall, because it reflects comprehension - the skill of central interest in this study and the skill that parents are less likely to be teaching directly, (c) the WISC-R Vocabulary subtest scale score, because vocabulary is seen as a crucial determinant of reading comprehension and also because vocabulary may reflect enrichment in the home more strongly than other literacy-related skills, and (d) children's word production scores on their expository and their narrative writing samples, because word production correlates highly with measures of writing quality (e.g., holistic ratings and holistic ranks) and because word production reflects children's familiarity with and interest in the writing task. On all four measures we used scores from the first year of our study because that was the time period in which the questions were asked in the family. In Chapter 8, gains over the course of the second year were analyzed in relation to school factors.

In this next section, then, we will present findings for each of the seven dimensions identified above, first how the variables reflecting those dimensions relate to the children's global status as above- or below-average readers, then how they relate to the children's scores on the four literacy measures: word recognition, reading comprehension, vocabulary, and word production.

Children's Literacy

A first question about our various literacy variables, both our grouping of the children as above- and below-average readers and our four literacy measures, is to what extent they are valid and reliable ways of assessing children's literacy skills. In this section we present data from the interviews with children and their parents in order to assess the relationships between children's test scores and the children's current literacy behaviors. Clearly, we are not trying to make any causal argument in this section - we are merely trying to test whether differences in the scores on reading, vocabulary, and writing tests relate to children's reports about their own reading, and to mothers' reports about their children's reading.

Reading status and child literacy. The above-average and below-average groups of children did not differ in how important they thought reading was, in whether they liked to play word games, in whether or not they read a newspaper regularly, in how frequently they went to the library, or in whether they had read a book lately for pleasure (see Table 9-1).

There were some differences between the two groups of children we designated above- and below-average readers, however. There was a significant difference ($x^2 = 4.658$, $p < .05$) between the two groups in whether they named themselves as the person in their family who reads the most. Only one below-average reader said he read the most of anyone in the family, but six above-average readers said they did. Above-average readers were also more likely ($x^2 = 5.0$, $p < .05$) to name a child (themselves or a sibling) rather than an adult as the person who reads the most in their families.

There was a tendency for above-average readers to name more books they had read recently than below-average readers did, with males and females reading approximately the same number of books. Above-average readers tended to have a special time in the day that they read, according to their mothers. Significantly more above-average readers (41.7%) than below-average readers (7%) named a favorite author - an interesting finding in light of the lack of difference between the groups in naming a favorite book.

About half of the children, slightly more above-average readers than below-average readers, said they like to read "a lot." Despite the fact that sixth graders in general said they didn't much like to read, the two sixth graders who reported liking to read "a lot" were above-average girls. One above-average sixth grade girl, though (Tracy Jenkins) said "not much" in response to "do you like to read?"

Table 9-1

The Relation of Children's Literacy to Reading Status

	Above Average	Below Average
% who think reading very important	50.0	46.7
% who like to play word games	76.5	80.0
% who use a dictionary at home	64.7	85.7
% whose family gets a newspaper	82.4	66.7
% who read a newspaper regularly	64.7	80.0
% who go to the library at least weekly	29.4	42.9
% who have read a book lately for pleasure	82.4	80.0
% who read the most in their family	40.0	00.07*
% who say child reads the most in their family	60.0	20.0*
Mean number of books' names	03.35	02.13+
% who have a favorite author	41.7	00.07**
% who report liking to read "a lot"	52.9	40.0
% who report reading is favorite subject	18.8	00.03
% who report reading is least favorite subject	00.06	00.00
% who report reading "very well"	29.4	00.07+
% who like book used for reading at school	93.8	66.7+
% who report being bored with reading at school	35.3	33.3

+ = .10

* = .05

** = .01

Slightly more above-average readers reported reading was their favorite subject at school, but one above-average child (a second grade boy) also said that reading was his least favorite subject. Five of the six children who reported they read "very well" were above-average readers. Above-average readers were somewhat more likely to like and less likely to dislike the book being used in their reading group at school. Slightly more below-average readers reported being bored with reading at school.

Literacy measures and children's literacy. The number of hours children read per week for pleasure, as reported by their mothers, was positively correlated with all four of the literacy measures. Children who read more had significantly higher word recognition scores, reading comprehension scores (although for this subtest the significance was at the .10 level only), WISC vocabulary scores and higher word production scores. It is interesting to note a very similar question also asked of mothers - the number of books the child read per month - was significantly related only to reading comprehension (see Table 9-2).*

A number of variables were related to the children's reading comprehension scores but not to their word recognition scores. Significantly higher reading comprehension scores were achieved by children who reported: they liked to read a lot, they read fast (but interestingly not that they "read well"), they went to the library frequently, and they had read more books recently for fun. Not surprisingly, children who were in the top reading group at school, according to their mothers, had significantly higher reading comprehension scores. Children who thought reading was important had significantly higher word recognition as well as reading comprehension scores.

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*See Appendix H for a complete correlation matrix of all Chapter 9 correlations between home factors and the four literacy measures.

Table 9-2

The Relation of Children's Literacy to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Mother's report: Number of books read/month		+2 +ALL		
Mother's report: Hours/week read for pleasure	+ALL	+ALL[A]	+ALL	+ALL
Mother's report: Hours/week read for assignment				
Mother's report: Reading group now (1=bottom)		+ALL		
Child likes to read (1=little)		+4 +ALL		
How well does child think s/he reads (1=not well)				-6
How fast child says s/he reads (1=slow)		+ALL	+4 +ALL	
How important is reading (1=not important)	+4 +ALL	+4 +ALL		
Number of books read for fun		+2 +4 +6 +ALL		+2 +ALL
Frequency to library (1=rarely)		+4 +ALL		
Frequency child writes in school (Child report)				-6

[A] Significant at p .10 level only

There was a tendency for sixth graders who had recently read more books "for fun" to have higher reading comprehension scores. At the fourth-grade level, higher reading comprehension scores were achieved by children who liked to read, who thought reading was important, who went to the library frequently, and who had read more books recently "for fun." In addition, fourth-grade children who thought reading was important also had significantly higher word recognition scores, and those fourth graders who said they "read fast" had higher WISC vocabulary scores. At the second-grade level, children who reported reading more books recently "for fun" tended to have higher reading comprehension scores and wrote longer papers.

During our interviews we asked the children whether they ever wrote letters, shopping lists, notes to friends, or wrote "just for fun." (Children interpreted "writing notes to friends" to mean writing notes to friends during class.) We found no difference between children who reported they liked to write and didn't like to write on the four literacy measures. We also found no difference on the literacy measures of children who said they did or did not write shopping lists or letters. We did find that children who wrote notes to friends had lower reading comprehension scores, and children who said they liked to write "for fun" had lower WISC scores (see Tables 9-3 and 9-4).

Conclusion. The strongest relationship between children's literacy behaviors and their test scores emerged from the question "how many hours a week does your child read for pleasure?"; children who were reported to read more scored higher on all the literacy measures. Children's self-reports were also roughly related to literacy measures, especially reports that they liked to read, thought reading was important read fast, and had read some books recently. Reading comprehension

Table 9-3

Significant ANOVA's on Children's Literacy

Does child write notes to friends?		Mean Deviation from Expected Reading Comprehension Score		
		Second	Fourth	Sixth
	Yes	-.1667	.4375	-.6375
	No	-.1000	1.933	1.200

Does child write "for fun"?		Means on Vocabulary		
		Second	Fourth	Sixth
	Yes	9.5556	9.4545	7.833
	No	11.00	14.000	9.33

Table 9-4

Non-Significant ANOVA's on Children's Literacy

Number of favorite authors

Child wishes had more time for reading

Child reads newspaper

Child uses dictionary at home

Child likes books for reading group

Child gets bored with reading at school

Mother reports: child likes to write

Child reports: likes to write

scores were better related to the children's reports than were the other measures. It is especially interesting to note how much stronger the relationships are between self-reported reading and the two reading subtests than between self-reported reading and the vocabulary or writing measures.

Family Constellation and Background

Numerous studies have related family constellation factors - the number of adults and children in the household - as well as the birth order and sex of the children to reading and more general school achievement. (For critical review of this literature, see, e.g., Cicirelli, 1978; Dwyer, 1973; Olneck and Bills, 1979; Longfellow, 1979). Thus, it seemed important to look at how these global or "packaged" variables related to the reading status and literary measures of the children in our study.

Reading status and family constellation and background. Table 9- 5 presents data relating the children's family constellations and backgrounds to their reading status. There are no significant differences between the groups we designated above-average and below-average readers in the number of adults or children in their households, nor in the sex or birth order of the focal children. We might have expected children who were the most recent immigrants to the U.S. to be among the below-average group, yet all the focal children born elsewhere, before their parents immigrated, were above-average readers.

Table 9-12

The Relation of Family Constellation and Background to Reading Status

Residential Status of Families:	Above Average	Below Average
% families in which both parents' families long-term residents	64.7	66.7
% families in which focal child's grandparents were immigrants	0	13.3
% families in which one or both focal child's parents came as children to U.S.	5.9	0
% families in which both parents immigrants as adults	11.8	20.0
% families in which focal child born elsewhere, before parents immigrated	17.6	0
% children in two-parent households	75.0	60.0
% children in one-parent household	25.0	40.0
Mean number of children in household	3.0	2.67
Mean number of children younger than focal child in household	1.27	1.88
Birth order:		
% first born	41.2	40
% second born	17.6	40
% third born	23.5	0
% fourth-sixth born	17.6	20
Sex:		
% males	52.9	53
% females	47.1	46.7

Literacy measures and family constellation and background. For the sample as a whole, the literacy measure most closely associated with the global family factors was word production. Children who wrote longer papers came from recent immigrant families, from families in which there were more children in the household and from families in which there were more children younger than the focal child. The only other finding for the entire sample was that children from one-parent households had higher vocabulary scores (see Table 9-6).

There were no associations between these family factors for the sixth graders and only one at the fourth-grade level; fourth graders whose families came to the U.S. more recently wrote longer papers.

There were many more significant correlations between the literacy measures and global family factors at the second-grade level than at the fourth or sixth grade, but only two of these related to reading. Contrary to some research findings and popular opinion, second graders who were first- and second-born children, and who came from larger families had higher reading comprehension scores than did later-born children and children from smaller families. In addition, second graders from larger families had higher WISC scores.

Second graders with higher vocabulary scores came from households in which there was only one adult and from families who were more recent immigrants to the U.S.

Conclusion. There are several important points to comment upon here. For the most part, the significant correlations found in this area were in the opposite direction to what we might have expected. For example,

Table 9-6

The Relationship of Family Constellation and Background to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Residential status in U.S. (1=long-term residents)			-2	+4 +ALL
Number of adults in households (1=one parent)			-2 -ALL	
Number of children in household younger than focal child		+2	+2	+ALL
Birth order of child		+2		+ALL

children from one-parent households had higher WISC scores than those from two-parent households did. The strongest associations between family constellation and background of the children and the literacy measures were at the second-grade level. Second-grade children from larger families had significantly higher scores on two out of the four literacy measures. There were only two significant associations between the reading measures and the family factors and these were at the second-grade level. For the sample as a whole, nearly all the associations were between word production and the family factors.

Mother's Education, Occupation and Activities

A number of studies have suggested that a mother's education is related to how she thinks about and behaves toward her children, which may, in turn, have an effect on their school achievement (Laosa, 1978; Durkin, 1964). More educated mothers may provide their children with more materials and activities which promote literacy; in addition, educated mothers may become more directly involved in their children's instruction.

We also were interested in exploring the extent to which mothers' work and involvement in other activities outside the home related to their children's literacy. Dave and Wolf (cited in Bloom, 1964) found that the extent and content of a family's activities influenced the education achievement of the children.

We therefore devised a composite community activity score, which reflects the mothers' involvement in social groups, political action and neighborhood association groups, job-affiliated groups, church organizations or other religious groups, and school-related groups (such as the PTA). Total possible scores on the Community Activities Scale ranged from 6 (indicating a low level of involvement in community activities) to 12 (indicating a high level of involvement). The range in our sample was between 8 and 12.

Reading status and mother's education. The reading status of the children was not related to the mothers' educational attainment, nor to whether the mothers said they liked school as a child, or were thought to be good students, nor to whether they planned to continue their education (see Table 9-7).

Literacy measures and mother's education. Mother's education was positively correlated to the children's word recognition scores for the entire sample and at the sixth-grade level (see Table 9-8). At the fourth-grade level, however, mother's education was negatively correlated with the children's reading comprehension scores. At the second-grade level, the mother's education was negatively related to the children's writing, but not to their reading or vocabulary tests. Sixth-grade children whose mothers reported having liked school a lot as a child also wrote significantly shorter papers.

Reading status and mother's work. The reading status of the children was not related to whether their mothers worked, whether their mothers were satisfied with their jobs or had progressed to higher-level jobs during their work lives.

Table 9-7

The Relation of Mothers' Education, Work and Activities to Reading Status

	Above Average	Below Average
Education		
% who finished high school	86.67	83.33
% who had some post high school education	20.	33.33
% who liked school as a child	64.3	90.9
% who said teachers thought they were a good student in elementary school	53.8	40.0
% who plan to continue education	33.3	50.
Work		
% who are working now	68.8	78.6
% who earned less than $200/ week	50.	50.
% who earned more than $200/ week	50.	50.
% who have "moved up" in general	38.5	58.3
% who are very satisfied with job	9.1	41.7
Activities		
% who are involved in some community activities	61.53	41.67

Table 9-8

The Relationship of Mother's Education, Work, and Activities to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Education				
Mother's education	+6 +ALL	-4		-2
Mother liked school as a child (1=little)				-6
Work				
Mother's satisfaction with job				
Mother's salary (1=low)	+2	-4		-6
Activities				
Mother's involvement in community activities (low score=low involvement)	+4 _ALL		+4 +ALL	

Non-signficant ANOVA's on mother's education, work and activities

Mother plans to continue education
Mother working now
Mother has "moved up" in general to higher-level job

Literacy measures and mother's work. The only aspect of mother's work that related to the children's literacy measures was salary. Second graders of mothers earning low salaries had lower word recgonition scores, although fourth-grade children of mothers earning low salaries had higher reading comprehension scores. Sixth-grade children of mothers with low salaries wrote more.

Reading status and mothers' activities. About half the mothers were not involved in any community activities. More mothers reported involvement in school-related activities than in any other kind, yet only a third of the mothers said they were involved in school-related activities at all. There were no differences between mothers of above-average and below-average readers in their involvement in community activities in general, nor in their involvement in school-related groups.

Literacy measures and mothers' activities. There were associations between the mothers' community activities and children's performance on several of the literacy measures. Mothers who participated in more community activities were significantly more likely to have children with higher WISC vocabulary scores and word recognition scores. At the fourth-grade level, children whose mothers were more involved in community activities had higher word recognition and vocabulary scores.

Conclusions. The findings on mothers' education, work and activities are mixed and thus somewhat puzzling. Mothers' education was associated with higher word recognition scores for the sample as a whole, and for sixth graders, but with lower scores in reading comprehension for fourth graders and lower word production for second graders. Furthermore, mothers' education was not related to the WISC vocabulary score at all. Mothers' degree of involvement in community activities, however, was related to children's vocabulary scores, as well as to word recognition scores.

Parental Expectations and Aspirations for Children

Parental aspirations and expectations for their children can be transmitted directly to the children as encouragement (Sewell and Hauser, 1976), and can also influence other aspects of parental behavior which might affect the children's achievment. Coleman (1966) found that parental aspirations and expectations related to children's achievement, for children older than those studied here. Thorndike (1973) and Plowden (1967) have confirmed the relationship of parental aspirations to school achievement in countries other than the U.S.

Reading Status. The majority of the mothers and fathers wanted and expected their children to graduate from college (see Table 9-9). Naturally, expectations were somewhat lower than aspirations, but neither differentiated the parents of above-average from those of below-average readers.

In general, a mother's expectation was congruent with her husband's. In only two cases (out of eleven) did fathers have lower expectations than mothers; in both cases, fathers of above-average girls expected their daughters to finish only high school, whereas the mothers expected their daughters to graduate from college. The Gallaghers are an example of a family in which the father expects less of his daughter than the mother does.

Table 9-9

The Relation of Education Aspirations and Expectations to Reading Status

	Mothers		Fathers	
	Above Average	Below Average	Above Average	Below Average
% who hoped child would finish college	81.25	61.53	83.33	50.
% who expected child to finish college	62.5	38.4	50.	50.
% who hoped for occupation requiring a college degree	77.8	72.72	66.67	100.
% who expected child to have occupation requiring a college degree	42.86	42.86	33.	33.

Given the lack of differentiation between above- and below-average children in the educational aspirations their parents have for them, it is not surprising that occupational aspirations and expectations are very similar and quite high for both groups as well. Although there are a few children like Kevin Shea or Teddy Woodward whose parents' low expectataions and aspirations may limit their own ultimate attainment, the majority of the below-average readers' parents expect them to get to college and to pursue middle-class occupations.

Literacy measures. Both mothers' aspirations and expectations for their children's education were positively correlated with the children's word recognition scores and WISC vocabulary scores for the entire sample (see Table 9-10). Mothers' aspirations, but not expectations, were positively correlated with the children's reading comprehension scores. Looking at correlations within the grade levels, sixth graders' mothers' aspirations and expectations for their children's education were positively correlated with the children's word recognition scores and fourth graders' mothers' aspirations and expectations were positively correlated with the children's WISC vocabulary scores. There was no relationship between aspirations or expectations and writing, despite the strong relationships with both reading and vocabulary.

Table 9-10

The Relationship of Mothers' Aspirations and Expectations to Children's Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Grade in school mother desires child to complete (1=low)	+6 +ALL	+ALL	+ALL	
Grade in school mother expects child to complete (1=low)	+6 +ALL		+4 +ALL	

Conclusion. Maternal aspirations and expectations for their children's educational attainment were most strongly related to word recognition and to vocabulary, but not related at all to children's word production in the writing sample. Maternal aspirations were less strongly related to reading comprehension. Thus our findings confirm, within this low-income sample, the cross-social class findings of Coleman (1966) and others that parents who have high expectations for their children are more likely to have children who achieve well. The findings are strongest, furthermore, for the fourth and sixth graders, suggesting that parental goals have an increasing impact as children get older.

Children's Activities

A bias of research about family influence on children has been to look at the family as a source of all effects, both positive and negative. The family, however, can also function to enrich children's lives indirectly by facilitating access to other people and activities. The stereotypical middle-class child being chauffeured to music, ballet, swimming and French lessons is receiving the benefits of that type of facilitation. Parents whose lives are busy with work and other obligations may spend very little time themselves with their children, but nonetheless ensure that the children spend time with other adults who may function as role models and who provide information, interesting conversation, knowledge about the world, help with homework and emotional support, or that they participate in lessons, classes, and other enriching activities. In this chapter we will present data on the chidren's contacts within their families (both nuclear and extended), as well as with other adults and with friends, and on their involvement in lessons, chores and other relatively structured non-school activities.

Reading Status. Data relating the children's contacts and scheduled activities to their reading status are presented in Table 9-11. There are few significant differences in this area, but there are some patterns that deserve further comment. The above-average readers were reported by their mothers to play with friends and with siblings significantly less often than the below-average readers. They did not, however, spend significantly more time with adults, and they were significantly less likely to be described as having a fewer-than-average number of friends.

Table 9-11

The Relation of Contacts and Activities to Reading Status

Nuclear Family Contacts	Above Average	Below Average
Mean number of hours/ school day with parent	3.7	3.6
Mean number of hours/ weekend day with parent	7.7	7.7
% who play with siblings daily	62.5	92.3+
% for whom an adult is present when they get home	64.7	63.6
% for whom an adult is present at supper	82.3	78.6
Extended Family Contacts		
Mean rating of contact with extended family	4.3	4.3
% who make visits to relatives at all	88.2	85.7
% who visit relatives more than once a month	46.7	58.3
Friends		
% who have a best friend	68.8	71.4
% who play with friends every day	52.9	85.7
% whose favorite activity is playing with other kids	56.2	57.1
% whose favorite activity is solitary	37.5	42.9
% who get together with friends regularly	47.1	64.3
% who have fewer than average friends	6.2	35.7
% described as very popular	43.7	35.7
Lessons and Non-school activities		
% who take lessons	23.5	57.1
% who go to regularly-scheduled non-school activities	64.7	35.7
% who go to museums, fairs, parks, etc., more than once a month	64.7	57.1
% who participate in organized non-school activities	47.1	71.4
TV		
% who watch TV before school	43.8	73.33*
% who watch TV after school	80.	85.7
% who report watching more than 4 hours/ day	25.	61.5*
% whose mothers report child watches more than 4 hours/ day	45.	36.4

+ = .10; * = .05; ** = .01

It may be that the above-average readers spend more time alone, reading, doing homework, or engaging in other solitary achievement-enhancing activities.

Below-average readers reported watching more television (four to eight hours per say) than above-average readers (under four hours per day). Furthermore, below-average readers tended to watch television more often in the mornings before school than did above-average readers. There were no other significant differences between above-average and below-average readers in other areas of television viewing, i.e., rules, content and time restrictions or what the children would do instead of watching TV.

Literacy measures and nuclear family contacts. We found no relationships between children's scores on the four literacy measures and the number of hours per school day the children spend with their mothers (see Table 9-12). The children's frequency of play with siblings was not linked to reading comprehension, WISC vocabulary or word production, but was related to word recognition for all children. Among the entire sample (and for the sixth-grade group), children with higher word recognition scores played with siblings significantly more often than did children with lower scores. This relationship did not hold, however, at the second- and fourth-grade levels.

Literacy measures and contacts outside the nuclear family. We had two measures of contact with extended family: a) frequency of visiting relatives, as gathered from interview data, and (b) our rating of frequency and regularity of contact. Second-grade children who visited

Table 9-12

The Relation of Contacts and Activities to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Nuclear Family Contacts				
Hours/school day with mother				
Hours/weekend day with				
Frequency of play with siblings (1=little)	-2 -4 +6 +ALL			
Contacts Outside Nuclear Family				
Frequency of child's visits to relatives (1=less frequent)	+2	+2		
Contact with extended family (1=no contact)	+2		-6	+4
Number of friends (1=less than average)				
Frequency of play with other children (1=rarely)				
Child's report: frequency of activities with parents, other adults	+4		+4 +ALL	
Mother's report: frequency to parks, museums (1=rarely)			+2 +ALL	+4
Mother's report: frequency of out-of-school activities (1=rarely)	+2	+ALL		+6
Mother's report: how well child gets along with adults (1=worse than average)		+2 -6		
Mother's report: how good child is at getting grownups to help (1=poor)		+6 +ALL	+6	-4

Table 9-12
(continued)

The Relation of Contacts and Activities to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Television				
Child's report: frequency child watches TV	-4	-4 -ALL		
Mother's report: frequency child watches TV	-2	-2	+6	

relatives more frequently had significantly higher word recognition and reading comprehension socres than did second grade children who visited relatives less frequently. The number of contacts with extended family (ranging from no regular contact to relatives living in the same household or building) was linked to several measures at the second, fourth, and sixth-grade levels. Second graders who had more contact with extended family had significantly higher word recognition test scores. Fourth-grade children who had more contact with extended family members wrote longer papers. For the sixth graders, however, infrequent contact with their extended families was related to higher WISC vocabulary scores.

There were no significant effects of contacts with friends on any of the literacy measures. We asked the mothers how well their children got along with adults and how good the children were at getting grownups to help them. The responses to these questions were linked to three of the literacy measures. For the sample as a whole, children who were better at getting grownups to help had higher reading comprehension scores. Sixth graders who were better at getting grownups to help not only had higher reading comprehension scores, but also higher WISC vocabulary scores. Paradoxical findings in light of these associations were that sixth graders with higher reading comprehension scores and fourth graders with higher word production were reported by their mothers to get along with adults "worse than average."

Literacy tests and nonschool activities. There were a number of associations between the extent to which children were involved in lessons, chores, and other activities and the four literacy measures. Both the mothers' and children's reports of the frequency with which the children went places with their parents or other adults were correlated with the WISC vocabulary score for the total sample: Children who went places with adults had significantly higher WISC and reading comprehension scores, and a tendency to have higher word recognition. For the fourth-grade group, frequency of nonschool activities with adults was positively related to word recognition and WISC vocabulary scores as well as word production. For the second-grade group, the frequency of activities with adults (as reported by the mothers) was positively correlated with the WISC vocabulary score. The childen who took lessons had significantly lower reading comprehension scores (see Tables 9-13 and 9-14).

We asked in our interviews how frequently the children did chores. Sixth-grade children who helped with chores more frequently had higher word recognition and WISC vocabulary scores. There were no significant correlations for the fourth-grade group. Second-grade children who helped with chores more frequently produced fewer words in their writing samples.

Literacy measures and television. Both children and parents reported on the number of hours the focal children watched television. Children who reported watching a lot of television per day had significantly lower reading comprehension scores; this was true for the total group as well as at the fourth-grade level. Also at the fourth-grade level, a lot of television viewing per day was significantly related to lower

Table 9-13

Significant ANOVA's on Contacts and Activities

		Average Deviation from Expected Reading Comprehension Score		
		Second	Fourth	Sixth
Does child take lessons?				
	Yes	-.5	-.8	-.1833
	No	.0714	1.433	-.9833

Table 9-14

Non-Significant ANOVA's on Contacts and Activities

Child has best friend

Child's favorite thing to do after school

Child's friends like to read

Child is more active than most children his/her age

Child would rather read than watch TV

Child report: child can watch TV anytime

Child report: child can watch whatever he or she wants on TV

Mother report: restrictions on TV time

Mother report: restrictions on TV content word recognition scores. Second graders whose mothers reported they watched more TV had significantly lower scores on both word recognition and reading comprehension tests. For sixth graders, those children who watched a lot of TV daily had higher scores on the WISC vocabulary test. There were no differences on any of the literacy measures between children who would rather read or watch TV.

Conclusion. Children's vocabulary and reading comprehension are positively affected by doing things with adults and in addition their reading skills are negatively affected by spending time with other children and by watching television. A puzzling finding is that sixth graders' vocabulary scores are positively correlated with time watching TV - this may be an artifact if the sixth graders who read better spent less time doing their homework. Second and fourth graders may show the striking negative effects of television on word recognition and reading comprehension because they are devoting time to television that they need to spend practicing their reading skills. The positive effect of outings with adults on vocabulary echoes the relationship between school-organized field trips and vocabulary gains (see Chapter 8). We might have expected that children who took lessons would score better, whereas in fact lessons were negatively related to reading comprehension for the total sample. At the sixth grade, however, the children who were taking lessons did score better on reading comprehension.

Level of Organization and Emotional Climate

Two related aspects of the quality of family life are 1) the degree to which the family organizes its time, its physical environment and the activities of its members and 2) the family members' perceptions of the emotional climate within the family.

Level of organization. Previous research has found that "level of organization in the family" (a rating scale based on a focused maternal interview) related to children's school achievement (Dave, 1963). Information about the level of organization of the families in our study came from a number of sources: 1) Observers' ratings of the families' organization of their physical environment and of the degree to which the families have rules and schedules (see Table 9-15 for the rating scales); 2) data concerning the frequency with which various family members missed, broke or changed appointments with interviewers; 3) questions to the children about whether and how often they were late to school; 4) children's diary reports, which included an indication of how consistent their schedules were for bedtime, mealtimes, doing homework, and doing chores; and 5) interview questions to family members on whether there were rules limiting amount or content of TV programs watched by the children.

Physical environment. Our ratings of the physical environment ranged on a five-point scale, from "chaotic and dirty" to "very neat and always organized."

Rules and schedules. The degree to which rules and schedules existed within a family was rated on a five-point scale, from "no rules, lack of predictable schedules" to "predictable schedules and reasonable expectations for the children."

Reliability of family members. The organization of the family may also manifest itself in the reliability of family members. We rated both mothers and fathers on their reliability in keeping appointments with us on a five-point scale from "broke appointments repeatedly or failed to be there for appointments" to "never broke or broke appointments only with reasonable warning."

Late to school. Organization of the family may also be manifested in whether the children get to school on time. Children reported the frequency with which they were late to school, from never to many times.

Consistency of schedules. Consistency of bedtime, mealtimes, homework, chores was gathered from interviews and the children's diaries.

TV rules. Several of the questions to parents and children about television viewing involved the existence of rules for watching.

Reading status and level of organization The reading status of the children was not related to our ratings of the physical environment, nor to our ratings of their families' rules and schedules. There was a tendency for male focal children to live in less rule-bound and less predictable housholds than female focal children (see Table 9-15).

Reliability of the parents was not related to the children's reading status. However, fathers of males were significantly more likely to break appointments with us than fathers of females. There was a tendency for below-average children to report being late to school more frequently than did above-average children.

Table 9-15

The Relation of Organization in the Family to Reading Status

	Above Average	Below Average
Ratings of Organization of Physical Environment		
1. Chaotic, dirty	0.0%	20.0%
2. Disorganized, dirty	17.6	6.7
3. Generally clean, somewhat disorganized or inconsistent in organization	23.5	33.3
4. Clean, pleasant, organized	35.3	33.3
5. "House proud," very neat, always organized	23.5	6.7
Ratings of Rules and Schedules in Family		
1. No rules, or rules not taken seriously, absence of predictable schedule, little sense of expectation for children's activities	11.8	21.4
2. No expectations for children, little sense of predictable schedule	0.0	7.1
3. Some rules, but they are easily transgressed, children might miss school, schedules unpredictable, some expectations for children	17.6	21.4
4. Rules and expectations are clear, but no (need for) highly rigid expectations about the children. Some flexibility in schedules	41.2	42.9
5. Very high expectations for the children, much reliance on the children. Fairly predictable schedules for meals, bedtime, homework	29.4	7.1
Rating of Reliability of Mother in Appointment Keeping		
1. % who broke appointment repeatedly, failed to be there for appointments	5.9	14.3
2. % who broke appointment often, needed reminders always	5.9	14.3
3. % who postponed frequently, when called	5.9	0.0
4. % who broke with good reason, perhaps late	29.4	28.6
5. % who never broke or broke only with reasonable warning	52.9	42.9
Rating of Reliability of Father in Appointment Keeping		
1. % who broke appointment repeatedly, failed to be there for appointments	0.0	0.0
2. % who broke appointment often, needed reminders always	27.3	50.0
3. % who postponed frequently, when called	36.4	25.0
4. % who broke with good reason, perhaps late	36.4	25.0
5. % who never broke or broke only with reasonable warning	0.0	0.0

Table 9-15, continued

Child Interview	Above Average	Below Average
% of children who report "hardly ever late for school"	76.5%	50.0%
Data from Winter Diaries		
% of children who had consistent bedtimes	54.5	77.8
% of children who had consistent mealtimes	50.0	55.6
% of children who did homework at same time at least two out of four days	33.3	100.0
TV Rules		
% of children who report restrictions on TV time	47.1	50.0
% of children who report restrictions on TV content	64.7	60.0

Approximately equal numbers of above- and below-average readers had consistent bedtimes and mealtimes during the school year according to data from the time allocation diaries. Few children reported doing homework at the same time each day, although both below-average readers for whom we have sufficient data to analyze said they did, which accounts for the differences between above- and below-average readers in this regard. In addition, equal numbers of above- and below-average readers had restrictions placed on their TV viewing.

Literacy measures and level of organization. There was a positive correlation between physical environment and the word production measure at the fourth-grade level; that is, the more organized the physical environment, the greater the word production. At the sixth-grade level, children from more organized households had higher scores on the word recognition test (see Table 9-16).

Significant correlations between our ratings of the families' rules and schedules and the literacy measures were found only at the fourth-grade level. Forfourth graders, the more predictable the family rules and schedules, the higher the word production.

Mothers' reliability in appointment keeping was not related to any of the literacy measures, but fathers' reliability was. For the sample as a whole and at the fourth-grade level, the more reliable the fathers were, the higher the children's word production. At the second-grade level, the less reliable the fathers, the higher the children's WISC vocabulary scores. The more often the children reported being late for school, the lower their word production scores, but the higher their WISC vocabulary scores.

There were no significant differences on the literacy measures for whether or not the children could watch TV any time and whether they could watch whatever they want, according to both child and mother reports (see Table 9-17).

Emotional climate. Related to the degree of organization within the family is the emotional climate of the family. Clinicians typically identify "disorganized family environments" with emotionally unstable environments, and have pointed out the adverse effects such environments have on children's development (see, for example, Friedman, 1973; Malone, 1963; Pavenstedt, 1965). We relied on five sources of information about the emotional climate within the family, an observer rating scale constructed for us and four scales included within the child interviews.

The observer rating scale was designed to rate each family on a five-point scale on the emotional stability they appeared to provide for the child. The scale ranged from "environment seems emotionally unstable, conflicting, perhaps even bizarre" to "family appears to provide a stable, sound, healthy emotional environment for the child" (see Table 9-18 for rating scale).

We felt it was also important to assess the children's perceptions of aspects of their home lives - how they regarded their relationships to their parents, how punitive they thought their parents were, how they viewed control over their own lives, and how frequently they turned

Table 9-16

The Relationship of Level of Organization to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Organization of physical environment	+6			+4
Rules and schedules in the family				+4
Reliability of mother				
Reliability of father			-2	+4 +ALL
Frequency child late to school (1=never)			+2 +ALL	-ALL

Table 9-17

Non-significant ANOVA's on Level of Organization

Child report: parents let child miss school

TV rules

to one or another family member for nurturance and support. The scales used for these assessments were:

Swanson Child-Parent Relationships Scale (CPRS). The CPRS consists of 50 statements describing various feelings which a child might have about his or her parents (Swanson, 1950). Children's responses reflect their evaluations of the happiness of their relationships with their parents. The possible range of scores is from 50 to 150 with a high score indicating an unfavorable view of the parent-child relationship. The observed range of scores of the focal child in our study was between 78 and 109, indicating a relatively healthy, happy scample.

The Punishment Scale was taken from Bronfenbrenner's Questionnaire for Children concerning Parental Behavior (Siegelman, 1965). It consists of eleven statements describing various kinds of punishments, such as, "I get sent out of the room" or "my parents nag me." The children were asked to indicate how frequently they experienced these kinds of punishments. Their answers were interpreted as indicating the children's appraisals of the punitiveness of their parent(s) rather than as factual information about the frequency with which they were punished. The possible range of scores is from 11 to 55. The observed range in our sample was from 20 to 55, with higher scores indicating perception of infrequent punishment.

Nowicki-Strickland Locus of Control Scale (1973). The abbreviated scale for grades one through six consists of 19 questions which are designed to assess whether children perceive themselves to be in control of the consequences of their behavior or whether they believe their fates to be determined by other people or by chance. One of the questions, for example, is "Most of the time do you feel that you have little to say about what your family decides to do?" Scores may range from 19-38. A low score indicates internal locus of control and a high score external locus of control.

Nurturance scale (Stress and Families Project, 1981). The Nurturance Scale consists of nine questions asking to whom the child would turn in various situations. We calculated separate "mother nurturance," "father nurturance," and "family member nurturance" scores for each. Scores ranged from 0 to 8 on mother nurturance, 0 to 8 on father nurturance, and 0 to 16 on family member nurturance.

Reading status and emotional climate. The reading status of the children was not related to our ratings of the emotional stability of their families (see Table 9-18). There were no significant differences between above- and below-average readers on the Child-Parent Relationships Scale, nor were there sex or racial differences on this scale.

There were no differences between above- and below-average readers on the Punishment Scale. However, there was a tendency for girls to feel they were punished less frequently than did boys, and children in the second grade felt they were punished significantly more often than did fourth and sixth graders.

The Locus of Control scale did not differentiate between above- and below-average readers nor between boys and girls. Hispanic children had significantly more external scores than did white or Black children.

Table 9-18

The Relation of Emotional Status to Reading Status

Ratings of Family Emotional Stability	Above Average	Below Average
1. The environment seems emotionally unstable, conflicting, perhaps even bizarre	5.9%	14.3%
2. Family has some emotional hazards, some difficulties that affect healthy emotional environment	5.9	14.3
3. Family has some problems, but they are not serious	17.6	35.7
4. Environment generally stable	47.1	23.5
5. Family appears to provide a stable, sound, healthy emotional environment for the children	28.6	7.1
Swanson Child-Parent Relationship Scale - Mean Score	99.18	99.88
Punishment Scale - Mean Score	49.47	44.6
Nowicki-Strickland Locus of Control - Mean Score	23.6	23.37
Nurturance Scale		
Mother Nurturance - Mean Score	4.94	4.8
Father Nurturance - Mean Score	1.94	2.6
Family Member Nurturance - Mean Score	8.17	8.47

Reading status was not related to the Nurturance Scale. Sixth graders tended to name friends as sources of support more frequently than second or fourth graders did; white children named family members as sources of support significantly more often than Black and Hispanic children did.

Literacy measures and emotional climate. The more emotionally stable the family environment was rated, the higher the child's WISC vocabulary scores and word production for the sample as a whole and at the fourth-grade level and the higher the word recognition at the sixth-grade level (see Table 9-19).

For all children, the more favorable the child's view of the parent-child relationship, the higher the word production in writing. The same positive correlation held true at the sixth-grade level.

The only significant finding on the Punishment Scale was at the second-grade level: second graders who felt they were punished the least by their parents produced longer writing samples.

There were no significant relationships between the Locus of Control and Nurturance Scales and the literacy measures.

Conclusion. What is striking here is that both the level of organization and the emotional climate in the family are most strongly related to the vocabulary and writing measures, but not to the reading tests or the reading status of the children. It may be that how many words children wrote or how clear their definitions were on the WISC vocabulary test was highly dependent upon feeling comfortable with or desiring to please the examiner. We might recall here Scarr's recent statement that "whenever one measures a child's cognitive functioning, one is also measuring

Table 9-19

Relationship of Emotional Climate to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Family emotional stability	+6		+4 +ALL	+4 +ALL
Swanson child-parent relationship scale				+6 +ALL
Punishment scale	+2			
Locus of control				
Child's perception of mother's nurturance				
Child's perception of father's nurturance				

cooperation, attention, persistence, ability to sit still, and social responsiveness to an assessment situation" (1981, p. 1161). These child characteristics may be more important in writing and language assessments than in reading assessments and may be fostered in families which have an organized household, which have predictable rules and schedules, and which provide a stable emotional environment for the focal child.

The four scales in the child interview assessing the children's perceptions of their home lives did not differentiate between above- and below-average readers, and two of the scales did not relate to any of the literacy measures. The Punishment Scale related only to word recognition at the second-grade level. The Swanson Child-Parent Relationship Scale related to word production, following the pattern observed for the rating scales of the family.

Stress

Considerable evidence has accumulated to demonstrate that the degree of stress they experience differentiates working-class from middle-class women more effectively than their goals or aspriations for their children or their understanding of their own role in the children's school success (Zelkowitz, 1982; Jeffers, 1967; Silverstein and Krate, 1975). Low-income women often do not have the resources of time, money, contacts and knowledge to provide their children with the remediation or enrichment they recognize is necessary (Belle, 1982). It seemed crucial, therefore, to collect information relevant to the degree of stress being experienced by the families in our sample. Measures of stress should reflect not only financial stress but also stress associated with "life events," which are changes in a family's life which require readjustment (Holmes and Masuda, 1974). Examples of life events include changes in residence; changes in the composition of family due to births, death, separation, divorce or other factors; and changes in the work, financial or health status of family members or those close to them. A further source of stress derives from being relied on by friends or relatives to provide financial or emotional support. Several researchers have recently observed that social ties of low income women involve both costs and benefits (e.g., Belle, 1982; Stack, 1974). Social ties may provide emotional support and valuable assistance but may also be associated with concern and stress.

The questions about familial sources of stress were used to create a composite social stress score for each respondent. The composite social stress scale included reponses to questions regarding whether the respondents' relatives were dependent either financially or emotionally upon them, whether they can be counted on when respondent is in trouble, whether relations are strained with relatives and whether the respondent feels resentful when relatives ask for help. The scores on the Social Stress scale ranged from 7 (indicating a very high level of stress) to 20 (indicating rather little stress). Possible scores ranged from 5 to 20. The questions relevant to life events that might have caused stress were looked at individually, as was the question regarding financial stress.

Reading status. The social stress score was related to children's reading status, with a tendency for highly-stressed mothers to have children who were below-average readers and for above-average readers to have mothers who were experiencing low levels of stress (see Table 9-20). The differences lie principally in that significantly more mothers of above-average readers feel they can count on their relatives when in trouble, more report never feeling resentful when relatives ask for help, and fewer report their relatives are dependent upon them emotionally.

There was no significant relationship between total family income or per capita income and reading status, nor between life event variables and reading status.

Table 9-20

The Relationship of Mothers' Stress to Child's Reading Status

	Above Average	Below Average
% experiencing high social stress	28.6	63.6+
% who can count on relatives most of the time	71.4	33.3+
% whose relatives are dependent on them financially	27.3	33.33
% whose relatives are dependent on them emotionally	50.	83.3+
% who never feel relations are strained between them and some of their relatives	50.	50.
% who never feel resentful when relatives ask for help	78.6	36.3*

+= p .10

*= p .05

Literacy measures. The mother's social stress score was not significantly related to the reading, writing or language measures (see Table 9-21). Children in families with higher total incomes had significantly higher reading comprehension and word recognition scores (relative to the norm for their grades) than did children from families with lower total income. There was no relationship between the family's per capita income and the children's reading achievement, however. Children whose mothers said they could easily get $100 if there was a sudden need had significantly lower WISC vocabulary scores than children of mothers who said they could get the money "with some difficulty (see Table 9-22).

Conclusion. The mixed pattern of results for social and financial stress suggests that stress is not a factor of great importance in determining children's literacy achievement, at least within the range of stress scores represented in this sample. The findings related to financial stress are very weak since per capita income is a better stress measure than total family income and since the "need for $100" question predicts in the wrong direction!

Table 9-21

The Relationship of Stress to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Social stress score of mother				
Family income (1=low)	+ALL	+ALL		
Income per capita				

Table 9-22

Significant ANOVA's on Stress

		Mean Vocabulary Scores		
		Second	Fourth	Sixth
- If you (mother) had a sudden, unexpected need for $100 could you get it?	Yes	8.40	8.57	8.50
	No	12.00	12.33	8.00

Literacy in the Home

There is considerable basis in the research literature to claim that the level of literacy in the home environment is related to children's school achievement (Shea, 1977; Bloom, 1976; Wolf, 1964; Dave, 1963; Ware and Garber, 1972; Walberg and Majoribanks, 1976). Such variables as number of books in the home (Lamme and Olmsted, 1977) and parents' expressed interest (Coleman, 1966) in reading have been found to correlate with children's reading achievement scores.

There are a number of dimensions to home literacy, which we attempt to distinguish from one another in this section. First of all, there is the parents' own literacy behaviors and preferences, which may have an effect on the child both directly (parent as role model) and indirectly (parents who read a lot may do other things that facilitate children's reading). Second, there are direct measures of parental provision of literacy to the child. Parental provision of literacy correlates highly, but not perfectly, with the parents' own literacy (see Chapter 3). Finally, aspects of the children's pre-reading history may affect their current literacy abilities - both how their parents provided literacy experiences for them during their preschool and early primary years, and also whether their early experiences with reading were successful or anxiety-provoking.

We found great difficulty in assessing literacy in our subject-families purely by observing the number of books in the home. Many of these low-income families maintained neat and tidy living rooms by virtue of putting things away in drawers and cabinets, and by throwing out magazines and newspapers, and giving away books once read. In many households we didn't have access to bedrooms or other places books might be kept. Ms. Saunders, for example, told us, "I'd show you around but the beds aren't made." We relied, thus, primarily on interview material about parental literacy, but felt dissatisfied that any single question adequately reflected the degree to which the parents and children exploited, enjoyed, relied on, or expanded their lives through literate activities. Accordingly, we also produced the summary variables, "parental literacy," and "provision of literacy," which incorporated all the information available about any family from formal interviewing and from informal observation and conversation (see Chapter 3).

Reading status and parental literacy. The status of the child as an above- or below-average reader was not related to whether the mother had read a book, newsmagazine, or newspaper during the previous week, to the number of magazines read regularly or occasionally, to whether or what kind of newspaper she reads regularly, to the number of authors or books she mentioned, or to her report as to whether she reads books and whether she likes to read. To the extent there is any difference between above- and below-average readers in their mothers' reading, it is caused by one above-average girl whose mother far outstripped all other parents in interest in books. There is no indication that these variables would be better related to children's reading for fathers. For example, 71.4% of fathers of above-average and 50% of fathers of below-average children read a book during the week prior to the interview, and 88% of fathers of above-average children and 60% of fathers of below-average children report that they like to read.

The evidence from the individual literacy questions is supported by an analysis of our summary variables reflecting mothers' and fathers' literacy, which shows no significant relationship between maternal or paternal literacy and child's reading status (see Table 9-23).

Literacy measures and parental literacy. In our analysis of the literacy measures we used variables relating to the mothers' reading habits (rather than to the fathers') because we had more complete information from mothers. Our rating of the mothers' literacy was linked to the children's reading. Children of mothers whom we rated "print-worms" or "readers" as opposed to "non-readers" or "minimal readers" had significantly higher word recognition and reading comprehension scores (see Table 9-24). In line with this finding, children of mothers who named more current favorite authors and more favorite authors as a child had significantly higher word recognition scores. Children of mothers who read national newspapers on a regular basis, such as the New York Times or Christian Science Monitor rather than city or local newspapers had significantly higher WISC vocabulary scores.

There were more links between mothers' literacy and the children's literacy measures at the sixth-grade level than the fourth and second grades. At the sixth-grade level, children of mothers with higher literacy ratings had significantly higher reading comprehension scores and wrote

Table 9-23

The Relation of Parental Literacy to Reading Status of the Children

	Mothers		Fathers	
	Above Average	Below Average	Above Average	Below Average
Ratings of Mothers' and Fathers' Literacy				
% who were rated: non-reader	6.	14.3	0.	0.
minimal reader	23.5	50.	20.	50.
reader	35.3	28.6	26.7	25.
'print worm' (reads books)	35.3	7.	26.	25.
% who like to read	85.7	76.9	88.	60.
% who read a book in last week	64.3	46.2	71.4	50.
% who read a magazine in past week	76.9	61.5	100.	25.
Mean number of magazines read regularly	2.87	2.0		
Mean number of favorite authors named	2.	1.6		
Mean number of favorite childhood books named	2.67	2.25		
Mean number of favorite childhood authors named	3.0	1.0		

Table 9-24

The Relationship of Mother's Literacy to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Rating of mother's literacy (1=non-reader)	+ALL	+6 +ALL		+6
Number of mother's favorite authors	+ALL			
Number of magazines read regularly	-4			
Level of newspaper read regularly (1=local, 5=national)		+6	+6 +ALL	
Number of favorite books as a child that mother remembers			-6 +4	
Number of favorite authors as a child	+ALL			

more words. In contrast, fourth-grade children whose mothers remembered more favorite books as a child had significantly higher WISC vocabulary scores. At the fourth-grade level, children of mothers who read more magazines regularly had lower word recognition scores. We found no relationship between any of the four literacy measures and mothers' reports of liking to read or mothers' reports that they regularly read books (see Table 9-25).

Reading status and provision of literacy. Above- and below-average readers did not differ in whether any one read to them, in whether their family received a newspaper or owned word games, whether any one recommended books to them or whether they used a dictionary at home. There was a tendency for above-average readers to report more often that their parents bought them books, and to report owning more books (see Table 9-26).

Literacy measures and provision of literacy. Children who owned more books and who reported someone had bought them books had higher reading comprehension scores (see Tables 9-27 and 9-28). Children from families with higher provision of literacy ratings produced more words in the writing samples. This finding was significant for the fourth graders as well as for the whole sample. Second grade children whose mothers wrote notes to them had significantly higher reading comprehension scores but they wrote fewer words in their writing samples.

Chomsky (1972) found signficant correlations between exposure to books, language maturity and reading achievement. Her work suggests that being read to and reading independently are important ways for children to learn the complex literacy language found in more advanced books.

Table 9-25

Non-significant ANOVA's on Parental Literacy

Mother likes to read

Mother reads books

Child report: mother likes to read

Child report: types of materials mother likes to read

Child report: father likes to read

Child report: types of materials father likes to read

Child report: person in family who reads the most

Table 9-26

The Relation of Provision of Literacy to Reading Status

	Above Average	Below Average
% who get read to or who got read to earlier	64.7	53.3
% whose parents buy them books	87.5	64.3
% who use a dictionary at home	64.7	85.7

Table 9-27

The Relation of the Provision of Literacy for Child to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Rating of provision of literacy for child				+4 +ALL
Number of books child owns		+ALL		+ALL
Frequency mother writes notes to child (1=infrequent)	-6	+2		-2

Table 9-28

Significant ANOVA's on Provision of Literacy

		Average Deviation from Expected Word Recognition Score		
		Second	Fourth	Sixth
Does anyone in your family sit down and read to you or let you read to them (or did they use to)?				
	Yes	-.36	.29	-.18
	No	1.15	-1.08	-1.20

		Average Deviation from Expected Reading Comprehension Score		
		Second	Fourth	Sixth
How often does someone sit down and read to you?				
	Everyday	.33	1.47	.80
	Sometimes	-.46	.59	-.28

		Average Deviation from Expected Reading Comprehension Score		
		Second	Fourth	Sixth
Does someone buy books for you?				
	Yes	-.07	1.43	-.26
	No	-.45	-.2	-1.13

		Average Deviation from Expected Word Recognition Score		
		Second	Fourth	Sixth
Does your family get magazines?				
	Yes	-.09	-.15	-.12
	No	-.93	-.55	-2.37

		Average Deviation from Expected Word Recognition Score		
		Second	Fourth	Sixth
Does child go to public library?				
	Yes	-.3	-.28	-.49
	No	1.5	-.30	-2.20

		Average Deviation from Expected Reading Comprehension Score		
		Second	Fourth	Sixth
Does child go to public library?				
	Yes	-.34	.61	-.04
	No	.40	2.50	-1.80

For the sample as a whole, children who reported their mothers or someone else read to them every day (or used to) had significantly higher reading comprehension scores than the group of children who reported that they were read to less frequently. We found no differences on the literacy measures between children whose mothers reported they did or did not tell them stories or discuss items from the newspaper, however (see Table 9-29). Children in the second grade who reported that someone read to them now or in the past (or let them read to that person) had significantly lower word recognition scores. Fourth- and sixth-grade children who reported someone had read to them had significantly higher word recognition scores, however. Second-grade children who said they went to the public library had lower word recognition and reading comprehension scores than those who didn't. Fourth-grade children who reported going to the library had higher word recongition scores, but lower reading comprehension scores than fourth graders who didn't. At the sixth-grade level, children who said they went to the library had both higher word recognition and reading comprehension scores. These differences between findings at each grade level may reflect the fact that parents of poor second-grade readers spend more time reading to their children and ensuring that they go to the public library. A similar pattern exists for the family subscribing to magazines: This has a negative effect on word recognition for second graders and a positive effect for fourth graders.

Reading status and children's reading and writing history. There were no differences between above- and below-average children in where they learned to read, how many favorite childhood books they mentioned,

Table 9-29

Non-significant ANOVA's on Provision of Literacy

Mother tells stories to child

Child owns word games

Mother discusses items from newspaper with child or whether anyone had read to them. As might be expected, below-average readers were more likely to be in the low reading group in first grade and above-average readers in the higher group (see Table 9-30).

Literacy measures and children's reading and writing histories. We found that children who had learned to read early, according to their mothers, had significantly higher word recognition, reading comprehension, and vocabulary scores at the time of our study than children who were reported to read later (see Tables 9-31 and 9-32). Children who were reported to have fewer problems learning to read wrote significantly longer writing samples during our study. Children who learned to use a pencil at home and could write their own names before kindergarden did not have significantly different scores from those who didn't or couldn't.

Turning to the findings at each separate grade level, it is interesting to note that ten of thirteen significant correlations between the variables relating to the children's early reading history (as reported by their mothers) and the four literacy measures were for the fourth-grade children. In contrast, there was only one significant finding for sixth-grade children: those sixth graders who had fewer problems learning to read had higher writing production scores. And there were only two significant findings at the second-grade level: those children who read earlier had higher word recognition and reading comprehension scores.

Fourth-grade children who read earlier had significantly higher word recognition, reading comprehension and WISC vocabulary scores. Curiously, fourth-grade children who had fewer favorite books as a young child had

Table 9-30

The Relation of Early Reading History to Current Reading Status

	Above Average	Below Average
% who learned to read before or during kindergarten	42.9	41.67
% who get read to now (or who got read to earlier)	64.7	53.3
% who could write name before kindergarten	61.5	54.5
Mean number of favorite childhood books	1.7	1.6
% who were in low reading group in first grade	23.1	72.7*
% who were in high reading group in first grade	46.2	9.0*

* $p < .05$

Table 9-31

The Relationship of Children's Early Reading History to Literacy Measures

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Mother's report: age child learned to read (1=early)	-2 -4 -ALL	-2 -4 -ALL	-4 -ALL	
Child's report: age child learned to read (1=early)			-4	-2
Mother's report: number of problems in first grade (1=fewer)	-4			
Mother's report: number of problems learning to read (1=fewer)			-4	-4 -6 -ALL
Mother's report: child's reading group in first grade (1=low)	+4			
Mother's report; number of favorite books child had when younger		-4		

Table 9-32

Non-significant ANOVA's on Children's Early Reading History

Mother report: child can write own name before kindergarten

Child report: learned to use a pencil at home significantly higher reading comprehension scores than those who didn't. Those fourth graders who had fewer problems learning to read had significantly higher WISC scores, and produced longer papers. Fourth graders who had been in the higher reading group in first grade and who had fewer problems in first grade had significantly higher word recognition scores.

Conclusion. Although the pattern of results for home literacy is by no means simple or unambiguous, it does emerge as a dimension of considerable power in relation especially to reading comprehension. Furthermore, it is clear that the effect of home literacy variables is very different at the different grade levels. Presumably the negative effects of provision of literacy at second grade reflect greater provision of literacy to children who have worse reading problems at that grade level, whereas the positive effects at higher grade levels reflect the fact that home variables become increasingly important as the literacy tasks facing the children become more complex and varied.

Summary

In this chapter we have examined the relationship between seven dimensions within the family (family constellation and background; maternal education, work and activities; educational aspirations and expectations; children's activities and contacts; level of organization and emotional climate; stress; and literacy) and children's reading status. We also looked at the relationships between these seven dimensions and four literacy measures (word recognition, reading comprehension, vocabulary, and writing production). For the sample as a whole, the four literacy measures reveal family influences better than the global reading status (see Table 9-33).

Different family factors influence different literacy measures. The two measures of reading, word recognition and reading comprehension were not influenced identically, however; some family factors influenced both of them: maternal aspirations for the children's education, maternal literacy, children's outings with adults and financial stress. Those factors that influenced word recognition but not reading comprehension were maternal expectations for child's education, the time children spent with other children, maternal education, and maternal activities.

Table 9-33

Summary of Family Influences on Reading Status and Literacy Measures

	Reading Status	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Family constellation				-	+
Family background					+
Mother's education		+			
Mother's work					
Mother's activities		+		+	
Aspirations		+	+	+	
Expectations		+		+	
Time with children	-	+			
Relations with adults			+ -	+	
Outings with adults			+	+	
Lessons					
Time watching television	+		+		
Level of organization				-	+
Emotional climate				+	+
Social stress	+				
Financial stress		+	+		
Maternal literacy		+	+	+	
Provision of literacy			+		+
Early reading history		+	+	+	+

In contrast, provision of literacy in the home for the child, time children spent watching television, and the children's relationship with adults influenced reading comprehension but not word recognition.

Children's vocabulary was affected by maternal aspirations and expectations for the children's education, outings and relations with adults, emotional climate, maternal literacy and maternal activities. It is noteworthy that one-parent households were associated with higher WISC scores and not related to the other measure. The writing measure, word production, was most strongly influenced by the family constellation and background and by the level of organization and emotional climate. In addition, provision of literacy for the child related to word production. The children's early reading history related to all four literacy measures, suggesting that children who were good readers early on have remained good readers.

At each grade level, different patterns existed between the family factors and the literacy measures (see Table 9-34). Provision of literacy is a good example of a family factor which yields a mixed pattern of results. Provision of literacy for the child was related to reading comprehension at all three grade levels and to word recognition at the fourth and sixth grade levels. However, it was negatively related to word recognition at the second grade level. It was not related to vocabulary at any grade level. For word production there was a negative relationship at second grade but a positive relationship at fourth grade.

Mother's literacy was not related to any of the four measures at the second grade level and there were mixed findings for the older children. At the fourth grade level, mother's literacy was positively associated with vocabulary but negatively with word recognition. At the sixth grade level mother's literacy was negatively associated with vocabulary but positively with word recognition and word production.

Table 9-34

Summary of Family Influences on Reading Status and Literacy Measures at Grade Levels Two, Four, and Six

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Second Grade	Mother's work Contact with extended family TV time (-) Punishment scale Provision of literacy Early reading history	Family size Contact with extended family Relations with adults TV time (-) Provision of literacy Early reading history Birth order	Family size Number of adults (-) On time to school (-) Residence status (-) Outings with adults Father reliability (-) On time to school (-)	Chores (-) Mother's education (-) Provision of literacy (-)
Fourth Grade	Mother's activities Outings with adults Early reading history TV time (-) Maternal literacy (-) Provision of literacy	Mother's education (-) Mother's work (-) Early reading history TV time (-) Provision of literacy	Aspirations Expectations Early reading history Mother's activities Outings with adults Emotional climate Maternal literacy	Residence status Organization of physical environment Rules and schedules Father reliability Emotional climate Provision of literacy Early reading history Outings with adults
Sixth Grade	Aspirations Emotional climate Expectations Provision of literacy Mother's education Time with siblings Organization of physical environment	Relations with adults (+)(-) Chores Provision of literacy Maternal literacy	Contact with extended family (-) Relations with adults Maternal literacy (-) TV time Chores	Mother's education (-) Maternal literacy Mother's work (-) Early reading history Outings with adults Child-parent relationship scale

Mother's education was negatively related to word production at second grade and to reading comprehension at fourth grade. At the sixth grade, mother's education was positively associated with word recognition but negatively with word production. These mixed findings for mother's education suggest that this factor may not be nearly as important as previous studies have indicated. Mother's aspirations and expectations for child's education were related to fourth graders' vocabulary and to sixth graders' word recognition. Mother's activities were associated with fourth graders' word recognition and vocabulary.

Children's outings with adults were associated with vocabulary at the second and fourth grade levels, with word recognition at fourth, and with word production at the fourth and sixth grade levels. For children at the second and fourth grade levels, the more they watched television, the lower their word recognition and reading comprehension scores were. However, contrary to what we would have expected, sixth graders who watched a lot of television had higher vocabulary scores.

There were different patterns for chores as well. Those children at sixth grade who did a lot of chores had higher reading comprehension and vocabulary whereas second graders who did a lot of chores had lower word word production.

Second graders who had extensive contact with extended family had higher word recognition and reading comprehension scores. However, extended family contact at the sixth grade was associated with lower vocabulary scores. Children's relationships with adults also produced mixed findings: they were positively associated with reading comprehension and second grade, but negatively as well as positively associated with reading comprehension at the sixth grade.

Contrary to what we might have expected, second grade children from one-parent families and from more recent immigrant families had higher vocabulary scores. The number of children in the family was related to reading comprehension and vocabulary at the second-grade level; second graders from larger families had higher scores.

Frequency of play with siblings yielded mixed results. It was only related to the word recognition scores but in different directions at the different grade levels. At the second and fourth grade more play with siblings was associated with lower scores and the opposite was true at the sixth grade level.

Our ratings of the family's emotional stability were significantly related to only fourth graders' vocabulary and writing production. Our ratings of the organization of the physical environment and the family rules and schedules were also related to fourth graders' writing production. At the sixth grade level, the organization of the physical environment was associated only with word recognition.

The above summary clearly shows that no one family factor is paramount in influencing children's performance on a range of literacy measures. Obviously, the problem is that the home factors may have measurable but very small effects: furthermore, the dimensions are not entirely independent of each other, and may have cumulative effects. They may even have interactive or synergistic effects, which are impossible to determine using the analyses presented above.

To discover both the relationships among the various family dimensions, and the total impact of the various family factors on children's literacy skills, it is necessary to carry out a more sophisticated multivariable analysis. We have, therefore, performed regression analyses in an attempt to relate several family dimensions to children's achievement in one analysis.

Regression Analysis

The Regression Analysis

Given the large number of variables for which significant correlations could be found, clearly not all possible regression models could be tested. Accordingly, five models which incorporated the factors identified above as related to the various aspects of literacy were proposed. These models and the summary variables relevant to each are discussed in this section (see Tables 9-35 and 9-36).

Parent as Teacher

One way in which parents can have a direct impact on their children's school achievement is to function as teachers themselves. We know that parents can and often do take a direct role in teaching their children. The Parent as Teacher tests to what extent direct parental teaching can explain variation in children's literacy skills. The components are: mother's education, father's education, literacy environment, help with homework, positive interaction over homework, mother's and father's own education, and our ratings of mother's and father's own literacy were included in the model because we believed that more educated and more literate parents might be better equipeed to teach their children. Parents' expectations may also play a role in children's achievement; parents who expect their children to get more education would be likely to provide direct teaching. We also assumed that the parents who see themselves

Table 9-35

Summary of Variables Used in Regression Models

Parent as Teacher

Literacy environment
Mother's education
Father's education
Mother's educational
  expectations
Father's educational
  expectations
Homework help
Parent-child interaction

Home as a Nice Place

Organization in home
Income per capita
Mother's social stress
Father's social stress

Time with children

Outings with adults
TV hours
TV rules

Home as Enriching

Literacy environment
Mother's education
Father's education
Child has older brother

Time with children

Diary activities
TV hours
TV rules

Home as a Negative Environment

Organization in home
Income per capita
Mother's social stress
Father's social stress
Child-parent relationship
Punishment scale

Parent as Partner with School

Parent school involvement
Contacts with teacher
On time to school
Homework help
Parent-child interaction

Table 9-36

Sources and Definitions of Variables Used in Regression Equations

Variables from Children's Interviews:

Outings with adults	- frequency child goes places with parents or other grown-ups in family
TV rules	- child report of whether there are time and/or content restrictions on TV viewing
Parent-child relationship	- child's score on Swanson Child Parent Relationship Scale (see page 9-39)
Punishment scale	- child's score on Punishment Scale (see page 9-39)
On time to school	- child's response to "Are you ever late to school?"

Variables from Children's Time Allocation Diaries

Diary activities	- number of activities children listed in diaries between the time between school and going to bed each day
Bedtime	- rating of how consistent child's bedtime was during school year

Variables from Parents' Interviews

Mothers' (and fathers') education	- grade in school completed
Mothers' (and fathers') educational expectations	- grade in school parent would like child to complete
Homework help	- frequency with which parents or siblings help child with homework
Income per capita	- mother's or father's report of income per capita

continued

Table 9-36, continued

Variables from Parents' Interviews, cont.	
Mother's (and fathers') social stress score	- composite social stress score (see page 9-46)
Plays with children	- frequency child plays with siblings and other children
Parent involvement	- frequency mother (and/or father) attends PTA and class meetings, school related committees and special programs as well as help in classroom or on field trips
Contacts with teacher	- frequency mother (and/or father) talked with teacher about child diary during school year.
Composite Variables	
Literacy environment	- average of three summary variables: provision of literacy for child, maternal literacy, paternal literacy
Organization in home	- average of (1) our ratings of organ of physical environ., rules and structure in family, reliability of mother, family emotional stability; (2) whether mother said child is expected to do chores and frequency child reports doing them, (3) consistency of bedtime as reported in winter diaries.
TV hours	- average of number of hours child, mother and father reported (independently) the child watched TV each day
Variable from Home Observations	Observer rating of degree to which parent-child interaction was positive or negative during diary task (each dyad's score was based on the sum of the Positive-Negative (P-N) Symlog ratings observer gave individually to parent and child).

as teachers would be more likely to provide a rich literacy environment for the children, as well as help them with homework. In addition, our observation of homework-like tasks, in relatively pedogogical homes, would reveal a facilitative parental style.

Home as a Nice Place

A second model conceives of the crucial contribution of children's homes as providing healthy emotional climate for development. Rather than teaching the children literacy skills themselves, the parents make sure the children feel happy, enjoy interacting with people, develop self-confidence and a positive self-image, equipped with which they then are more likely to succeed at any learning situation.

The components of this model include per capita income, social stress of parents, frequency of children's activities with adults and with other children, level of organization and rules and schedules, as well as amount of and rules about television. Our assumption is that a positive environment for the child would include adequate per capita income and no more than moderate levels of stress on the parents. Highly stressed parents are unlikely to be able to build positive attitude and self-confidence in the child. In addition, the provision of a wide range of activities for the child with other children as well as with adults contributes to opportunity to have fun. Homes in which there are predictable rules and schedules will be characterized by low levels of conflict and uncertainty. Reasonable rules about how long and what children may watch on television, as well as how much TV the child actually watches, may also be a positive factor in the children's lives, contributing to their sense of being cared for and reducing conflicts with adults.

Home as Enriching

The third model tests the effect of the home as a source of learning that would supplement and expand on school learning. Rather than teaching school skills directly, or functioning to produce children with positive self-image, homes are conceived of as the source of enrichment and experiences with non-school-related learning experiences.

The components of this model are: literacy environment provided for the child, mother's and father's education, frequency and range of child's activities, whether the child has a brother, number and kinds of rules about child's television viewing. By home as enriching, we meant that the home provides intellectual stimulation for the child, that might aid in the child's academic success. We felt these could include a wide range of activities, as well as educated parents who provide a rich literacy environment for the child. Moderate and monitored use of TV can also contribute to the child's knowledge. We also included having a brother because studies have suggested that children who have brothers do better academically than children who don't have brothers, presumably because the sibling is the source of additional knowledge and a entree to additional activities.

Home as a Negative Environment

Just as we conceived of a model in which the home was seen as a positive environment for the development of the child's self-concept, another model could test the effect of the home's negative effects on the child's development. To the extent that the home is a setting of conflict, of stress, of learning to be helpless, frustrated and joyless when approaching learning tasks, it will hamper children's ability to function at school. The components of this model include per capita income and social stress of mother and father, the child's perception of his or her overall relationship with parents, how punitive the child sees his or her parents to be, and the level of organization and rules and schedules in the family.

The absence of organization and predictable rules and schedules in the family could be seen to have a negative impact on the child by contributing to the levels of conflict in interaction among family members, and by leaving the child with a sense of uncertainty. Similarly, low per-capita income and high levels of parental stress mean that parents' emotional energies are directed toward solving their own problems and raise the risk of parental depression (Belle _et al._, 1982). Children who feel they have poor relationships with their parents and who feel they are punished frequently see their own homes as places where they are unhappy.

Parent as Partner with School

In this model, we consider the effect of the parent who sees his/her role as a partner with teachers and the school. Parents who function as partners provide direct help to their children in support of the school's efforts, in consultation with teachers, and in accordance with the school-based curriculum, rather than either providing direct instruction in literacy themselves, or leaving school skills to the teacher and concentrating on enrichment that goes beyond school instruction.

Components of the parents as partner model include parent involvement in school activities, parent contacts with teachers, parental help with homework, and nature and tone of interactions during a homework task, as well as whether the child gets to school on time.

The findings reported in Chapter 6 on the importance of school-home contacts indicate that this model may be very powerful in explaining variance in children's school achievements and literacy skills.

Results of the Regression Analysis

These five models can be grossly categorized into two types - the models which emphasize the cognitive impact of the home (Parent as Teacher, Parent as Partner and Home as Enriching) versus those that emphasize the emotional impact of children's families (Home as a Nice Place, Home as a Negative Environment). The reality of this distinction can be seen in Table 9-37, which presents the percentage variance explained by each model for each of the four literacy measures. It is clear that the cognitive models have high predictive power for word recognition and vocabulary, while the emotional models explain much more of the variance on word production. Reading comprehension presents the most complex case: the lowest amount of total variance is explained and both cognitive and emotional models explain amounts of variance.

Given the rather small number of variables entered into these models, an impressively large amount of the variance on the measures is explained. - as high as 60% in one case The differential effectivenss of the various models for the various literacy measures makes clear once again that

Table 9-37

Percentage Variance Explained on Literacy Measures by Five Models

	Word Recognition	Reading Comprehension	Vocabulary	Word Production
Parent as teacher	.44	.28	.47	.30
Home as nice place	.14	.28	.20	.43
Home as enriching	.44	.23	.60	.31
Home as negative environment	.12	.05	.16	.43
Parent as partner	.32	.21	.38	.32

literacy is a set of separate skills, not one skill that is globally affected by home factors.

In the following sections we will discuss each literacy measure in turn, and the variables that combine in the most powerful models to explain significant amounts of variance.

Word recognition. Two closely related models - Home as Enriching and Parent as Teacher - both explain 44% of the variance on word recognition (see Tables 9-38 and 9-39). Very powerful variables within both models are mother's education and father's education, but mother's educational expectations makes the largest contribution to Parent as Teacher; Literacy Environment is a minor contributor in both models.

The Parent as Partner model also explains 32% of the variance on word recognition (see Table 9-40). Its power is noteworthy because the powerful variables are completely different from those in the other two cognitive models - contacts with teachers, parent involvement in school and child tardiness.

The two emotional effects models explain rather little variance (14% and 12%) on word recognition with no single variable except number of activities listed in the diary explaining more than 5% of the variance (see Tables 9-41 and 9-42).

The results on word recognition suggest strongly that better educated parents who have high expectations for their children's educational achievements, who provide a rich literacy environment and maintain good contacts with teachers and school activities can contribute to their children's word-recognition skills. The strong similarity between word recognition and vocabulary in the highly-explanatory models (and in the skills required to succeed on both tasks) require that we compare carefully

Table 9-38

Percentage Variance on Word Recognition Explained by Home as Enriching Model

	Multiple R	Variance Explained	Simple R	B	Beta
Mothers'-education	.45	.21	.45	-.95	-1.87
Literacy environment	.49	.24	.34	5.89	4.06
TV rules	.50	.25	.15	-.68	-.75
Diary activities	.50	.25	.20	-.85	-3.74
Time with children	.51	.26	-.14	-1.07	-1.68
Father's education	.61	.37	.18	1.36	2.83
Child has older brother	.66	.44	.09	.94	.32

Table 9-39

Percentage Variance on Word Recognition Explained by Parent as Teacher Model

	Multiple R	Variance Explained	Simple R	B	Beta
Mother's educational expectations	.54	.29	.54	1.59	.86
Father's education	.59	.35	.18	-.32	-.67
Mother's education	.65	.42	.45	.20	.39
Literacy environment	.66	.43	.34	-.26	-.18
Father's educational expectations	.67	.44	-.10	.17	.16

Table 9-40

Percentage Variance on Word Recognition Explained by Parent as Partner Model

	Multiple R	Variance Explained	Simple R	B	Beta
Contacts with teacher	.32	.11	-.32	-.43	-.56
Parent school involvement	.45	.21	.26	.72	.37
On time to school	.54	.30	.00	-.87	-.38
Parent/ child interaction	.56	.31	.19	.18	.15
Homework help	.57	.32	.15	.36	.12

Table 9-41

Percentage Variance on Word Recognition Explained by Home as Nice Place Model

	Multiple R	Variance Explained	Simple R	B	Beta
Outings with adults	.24	.06	.24	.49	.24
Diary activities	.30	.09	.20	.66	.29
TV rules	.33	.11	.15	.16	.18
TV hours	.36	.13	.02	-.35	-.19
Income per capita	.37	.14	-.00	-.54	-.09
Mother's social stress	.37	.14	.00	-.69	-.04

Table 9-42

Percentage Variance on Word Recognition Explained by Home as a Negative Environment Model

	Multiple R	Variance Explained	Simple R	B	Beta
Parent/ child relationship	.20	.04	.20	.21	.24
Organization in home	.27	.07	.15	.52	.32
Punishment scale	.31	.09	.09	.16	.18
Father's social stress	.32	.10	.08	.20	.11
Mother's social stress	.34	.11	.00	-.20	-.12
Income per capita	.35	.12	-.00	-.45	-.08

the variables that contribute to explaining variance on word recognition and on vocabulary.

Reading comprehension. As noted above, a cognitive and emotional model both explain significant amounts of variance on reading comprehension. The cognitive model - Parent as Teacher (see Table 9-43) - reflects the major contributions of Literacy Environment (9%), father's education (5%), mother's education (3%), maternal educational expectations (3%), and family members' help with homework (4%). The emotional model - Home as a Nice Place - on the other hand, has a radically different set of powerful predictors (see Table 9-44): frequency of outings with adults (6%), existence of TV rules (6%), frequency of playing with agemates (5%), and amount of time watching TV negatively related to score (4%).

The other three models explain very little variance not accounted for by the above-mentioned variables (see Tables 9-45, 9-46, 9-47) except that parent involvement with schools and family members' help with homework explain 10% and 9% of the variance respectively, accounting for the reasonable showing of the parent as partner model (21% of the variance).

The inability to find any model that explained more than 28% of the variance in reading comprehension reveals how complex the relationships to reading comprehension are - a confirmation of the importance of the questions that motivated this study. Success in reading comprehension is facilitated by direct parental provision of literacy and homework help by parental cooperation with schools, and by engaging in activities with adults - but

Table 9-43

Percentage Variance on Reading Comprehension Explained by Parent as Teacher Model

[redacted]	Multiple R	Variance Explained	[redacted]	[redacted]	Beta
Literacy environment	.30	.09	.30	.48	.04
Mother's education	.35	.12	-.05	-.81	-.18
Mother's educational expectations	.39	.15	.19	1.60	.97
Father's education	.45	.20	-.16	-.32	-.75
Father's educational expectations	.47	.22	-.10	.46	.50
Homework help	.51	.26	[redacted]	[redacted]	-.33
Parent/ child interaction	.53	.28	[redacted]	[redacted]	[redacted]

[redacted] [redacted]

[redacted] [redacted]

Table 9-44

Percentage Variance on Reading Comprehension Explained by Home as Nice Place Model

	Multiple R	Variance Explained	Simple R	B	Beta
Outings with adults	.24	.06	.24	.59	.33
TV rules	.34	.12	.24	.32	.40
Organization in home	.39	.15	.01	-.50	-.35
Income per capita	.42	.17	.18	.60	.12
Diary activities	.44	.19	.09	.76	.38
TV hours	.48	.23	-.11	-.58	-.37
Time with children	.53	.28	.07	.14	.24
Mother's social stress	.53	.28	-.01	.72	.05
Father's social stress	.53	.28	.02	.57	.04

Table 9-45

Percentage Variance on Reading Comprehension Explained by Home as Enriching Model

	Multiple R	Variance Explained	Simple R	B	Beta
Literacy environment	.30	.09	.30	.28	.22
TV rules	.36	.13	.24	.22	.28
Father's education	.41	.17	-.16	-.77	-.18
TV hours	.44	.19	-.11	-.47	-.30
Mother's education	.47	.22	-.05	-.78	-.17
Diary activities	.48	.23	.09	.53	.26

Table 9-46

Percentage Variance on Reading Comprehension Explained by Home as Negative Environment Model

	Multiple R	Variance Explained	Simple R	B	Beta
Income per capita	.18	.03	.18	.12	.23
Parent/ child relationship	.21	.05	-.09	-1.00	-.13
Organization in home	.23	.05	.01	-.81	-.06
Mother's social stress	.23	.05	-.01	-.52	-.04
Punishment scale	.23	.05	-.02	.17	.02

Table 9-47

Percentage Variance on Reading Comprehension Explained by Parent as Partner Model

	Multiple R	Variance Explained	Simple R	B	Beta
Parent school involvement	.32	.10	.32	.87	.51
Homework help	.43	.19	-.09	-.78	-.29
Parent/ child interaction	.45	.20	.12	.13	.12
On time to school	.46	.21	-.05	-.25	-.12
Contacts with teacher	.46	.21	.03	-.37	-.06

by other factors as well. It may be that reading comprehension is the literacy skill that is most equally dependent on home and on school factors, where a major part of the variance is simply not explainable by either home or school independent of the other.

Vocabulary. The Home as Enriching model explains 60% of the variance on Vocabulary (see Table 9-48) with both number of hours watching TV and Literacy Environment accounting for 15% of the variance (hours watching TV is negatively related to vocabulary scores), and frequency of playing with other children negatively related to vocabulary (9%). Other important contributions are father's education (8%), existence of TV rules (5%), and self-reported frequency of activities (4%).

The Parent as Teacher model explains 47% of the variance on vocabulary but several of the important variables overlap with Home as Enriching (see Table 9-49). Father's education explains 18% of the variance on vocabulary, and mother's and father's educational expectations each add 5%. The Parent as Partner model (see Table 9-50) explains 38% of the variance, with the frequency of child-reported tardiness to school (13%), parent involvement in school (15%), and parental facilitation of homework task (7%) loading heavily.

The two emotional effects models (Tables 9-51 and 9-52) explain rather little variance on vocabulary (20% and 16%), but frequency of outings with adults explained 12% of the variance and our summary variable reflecting rules and schedules explained 9% of the variance.

Thus, vocabulary is the most sensitive of the literacy measures to home effects, and especially reflects the positive impact of children's

Table 9-48

Percentage Variance on Vocabulary Explained by Home as Enriching Model

	Multiple R	Variance Explained	Simple R	B	Beta
Literacy environment	.39	.15	.39	5.88	2.45
Diary activities	.44	.19	.11	-1.12	-2.99
Time with children	.53	.28	-.08	-1.30	-1.23
TV hours	.66	.43	.06	.38	1.28
Father's education	.72	.52	-.13	.68	.85
TV rules	.75	.57	.23	-.56	-.38
Child has older brother	.77	.60	-.04	.93	.19

Table 9-49

Percentage Variance on Vocabulary Explained by Parent as Teacher Model

	Multiple R	Variance Explained	Simple R	B	Beta
Literacy environment	.39	.15	.39	-.35	-.14
Mother's educational expectations	.45	.20	.37	2.88	.94
Father's education	.62	.38	-.13	-.81	-1.01
Father's educational expectations	.66	.43	-.14	.39	.22
Mother's education	.68	.46	.21	.19	.22
Homework help	.68	.47	.17	.69	.14
Parent/ child interaction	.68	.47	.19	.14	.07

Table 9-50

Percentage Variance on Vocabulary Explained by Parent as Partner Model

	Multiple R	Variance Explained	Simple R	B	Beta
On time to school	.36	.13	-.36	-2.06	-.54
Parent school involvement	.53	.28	.33	.13	.41
Parent/ child interaction	.60	.35	.19	.56	.28
Contacts with teacher	.61	.37	.15	-.19	-.15
Homework help	.62	.38	.17	.66	.13

Table 9-51

Percentage Variance on Vocabulary Explained by Home as Nice Place Model

	Multiple R	Variance Explained	Simple R	B	Beta
Outings with adults	.35	.12	.35	.96	.28
TV rules	.42	.18	.23	.27	.18
Organization in home	.44	.19	.30	.45	.17
Mother's social stress	.44	.20	.03	-.25	-.09
Diary activities	.45	.20	.11	.18	.05
Father's social stress	.45	.20	.15	.96	.03

Table 9-52

Percentage Variance on Vocabulary Explained by Home as Negative Environment Model

	Multiple R	Variance Explained	Simple R	B	Beta
Organization in home	.30	.09	.30	1.13	.42
Parent/ child relationship	.35	.12	.12	.25	.18
Mother's social stress	.38	.14	.03	-.54	-.20
Father's social stress	.39	.15	.15	.31	.11
Punishment scale	.39	.16	-.11	.52	.04

activities with adults, their access to literacy activities and materials and limitations on their use of TV, as well as the cooperation of parents with teachers and positive interactions during direct parent teaching.

Word production. Alone among the literacy measures, word production is primarily related to emotional factors in the home and two emotional effects models each explain 43% of the variance on word production, but the crucial variables in the two models do not overlap significantly. The Home as a Negative Envrionment model (see Table 9-53) relies on children's perceptions of their relations with their parents (26%), on our summary variable reflecting rules and schedules (7%), and on the children's perceptions of how punative their parents are (5%). Home as a Nice Place (see Table 9-54), on the otherhand, reflects a 19% contribution of hours spent watching TV (more TV related to lower word production score) and a 6% contribution of the existence of TV rules (fewer rules is related to higher word production scores). This finding relates to earlier findings reported in Chapter 3 that older children reported fewer TV restrictions than younger children did. We hypothesize that children's development of a positive self-concept and a good basis for relations with adults has a greater effect on the writing task, which requires willingness to work and lack of anxiety than on the other literacy tasks, because they are less subject to the effects of emotional factors.

The additional variables which show a large effect in the three congitive models (see Tables 9-55, 9-56 and 9-57) are literacy environment (5%), father's educational expectations (18%), parental facilitation of

Table 9-53

Percentage Variance on Word Production Explained by Home as Negative Environment Model

	Multiple R	Variance Explained	Simple R	B	Beta
Parent/ child relationship	.51	.26	-.51	-.15	-.46
Organization in home	.58	.33	.34	29.96	.51
Punishment scale	.62	.38	.02	.83	.26
Mother's social stress	.64	.41	.06	-1.20	-.20
Income per capita	.65	.42	-.10	-2.48	-.12
Father's social stress	.66	.43	.20	.69	.11

Table 9-54

Percentage Variance on Word Production Explained by Home as Nice Place Model

	Multiple R	Variance Explained	Simple R	B	Beta
TV hours	.44	.19	.44	1.27	.19
Organization in home	.52	.27	.34	32.26	.54
TV rules	.58	.34	-.09	-7.73	-.24
Mother's social stress	.61	.37	.06	-1.47	-.24
Time with children	.62	.39	.20	5.44	.24
Diary activities	.65	.42	.39	2.04	.25
Income per capita	.66	.43	-.10	-2.45	-.12
Outings with adults	.66	.43	.22	.31	.04
Father's social stress	.66	.43	.20	-.22	-.03

Table 9-55

Percentage Variance on Word Production Explained by Parent as Teacher Model

	Multiple R	Variance Explained	Simple R	B	Beta
Father's educational expectations	.42	.18	.42	15.21	.40
Parent/ child interaction	.50	.25	.37	12.83	.29
Mother's education	.55	.30	-.13	-4.36	-.24

Table 9-56

Percentage Variance on Word Production Explained by Home as Enriching Model

	Multiple R	Variance Explained	Simple R	B	Beta
TV hours	.44	.19	.44	1.64	.25
Child has older brother	.47	.22	-.10	-29.04	.27
Diary activities	.51	.26	.39	4.34	.52
Literacy Environment	.56	.31	.09	-17.22	.33

Table 9-57.

Percentage Variance on Word Production Explained by Parent as Partner Model

	Multiple R	Variance Explained	Simple R	B	Beta
Parent/ child interaction	.37	.13	.37	16.51	.37
Parent school involvement	.51	.26	.30	2.73	.39
On time to school	.56	.31	.30	19.75	.24
Homework help	.57	.32	.00	-1.62	-.15

homework (13%), mother's education (5%), parent involvement in schools (13%) and frequency of self-reported tardiness to school (5%). It is noticible that even those variables from the cognitive models that predict word production are quite closely related to aspects of emotional environment - especially parental facilitation of homework, which is a measure of the positive force between parent and child during the diary task, and parental educational expectation, which can be seen as related to the degree of parental approval of the child. The strictly cognitive variables - literacy environment, for example, or parental education - make much smaller contributions to explaining the variance on word production.

The two family case studies which follow illustrate the variability in the home factors we have discussed in this chapter.

The Costello Family

Mr. and Mrs. Costello and their three teenage children live in a small apartment in the Righetti Field Projects. In many ways, it's a typical family with teenagers, with the son involved in sports, the daughters fighting over clothes, all the kids arguing with their father over money. The living room of their three bedroom apartment is decorated with school photos of the children, collections of owls, cars, trophies, dolls, a small organ, a huge poster of John F. Kennedy on the wall, and about twentybooks tucked under the table in the corner.

Mr. Costello works as a job supervisor for Norwich's Work Experience Program for disadvantaged youths. Mr. Costello feels he has been successful in his job because the kids with whom he works used to be "into drugs or bad language;" he has positive regard for these children: "I love working with kids helping them out, teaching them right from wrong."

As far as his own children are concerned, Janice, 17 -- the oldest child -- is his shining star. He would like her to go to business school; Mrs. Costello would like her to be a nurse or stewardess but feels "she's not cut out for it. Merchandising would be a good choice." Janice is clearly seen as the achiever in the family (even though on a normative scale she does not fare well). She is due to graduate from high school this year, whereas her younger brother, Walter, aged 16, has recently dropped out of high school, and her fourteen year old sister, Elaine, our focal child, is learning disabled. Janice boasted to us, "I think I'm more intelligent than the other members of my family, even smarter than my father." In contrast, Elaine thinks her father is the smartest person she knows, "cuz he knows everything."

Walter dropped out of school this year because it bored him -- "taking a bunch of shops and stuff." Right now he's working at a local drugstore, but plans to go back to school next fall. His mother told us that before Walter dropped out of school the family used to get phone calls from school every day because Walter complained of headaches and stomachaches. Someone at school finally suggested, 'why don't you let him drop out and work and see what that is like.' Mrs. Costello said, "I'd never thought of it like that before."

If there is a family scapegoat, it's Elaine. She seems to share very little with her siblings in the way of activities, supporting and encouraging each other, confiding in each other, or going out with friends. Although this is a family in which achievement is not stressed, Elaine is still an outsider. The household cannot help her with her learning disability and other family members have a disparaging attitude toward her.

Both Mr. and Mrs. Costello speak of Elaine in negative terms: she doesn't act her age, her friends are younger than she is, "she can't concentrate, she doesn't have patience to sit down long enough," she spends money unwisely, she doesn't listen. During one of our interviews, Elaine came in late with a friend; Mr. Costello scolded her and said, "now sit down and talk to this lady." Mr. Costello thinks Elaine can be outgoing and friendly, but he also describes her as a "wild kid" and added that Elaine "has a lot of me in her. I was wild as a kid, too." Mr. Costello believes Elaine will be fine after she settles down a little,"but she's lazy." However, he persists in talking about how she doesn't measure up to her older sister. Mrs. Costello berates Elaine frequently, yelling at her, calling out to her from the kitchen window when Elaine is "hanging out," threatening to hit her. This is reported by Mrs. Costello herself and also happened several times when we visited. During an interview with us, when asked how old she was when she learned to read, Elaine immediately jumped up to go ask her mother: "Mom, what age did I learn to read?" "You still don't know how to read." Elaine looked as though she had been slapped in the face but asked her mother again and was told "last year." When she went back to her interviewer, she said "that would be last year," not seeming to think there was anything unusual about her learning to read at age twelve.

Janice also belittles Elaine, trying to tell her how to look and how to improve her appearance (Elaine is quite unkempt most of the time); however, it's more in a scolding than big-sisterly helpful manner. Janice gets raging mad when Elaine wears her clothes. She also feels that Elaine is always in her way; "When I'm dating a fellow she'll tell him that I went out with someone else and cheated on him." Janice sets herself apart, not only from Elaine but from the rest of the family as well. "Sometimes they don't have scruples, they will embarrass me." She is very particular about her appearance, spending hours in the only bathroom in the apartment. She wants to go out and meet new people and hates the Projects, saying she's "the most to complain that the family lives here." Her mother voiced her own concerns about living in the Righetti Field Projects: "I hate living here, they're animals. This is no place to bring up a child." Mr. Costello, on the other hand, thinks that the quality of life around the projects has improved and that it is not the dangerous neighborhood it is thought to be.

The Costellos are a temperamental family, with a tendency to yell and fight. Elaine throws things when she gets mad and is least able to control her temper. Brother Walter told us matter of factly, "Sometimes I start trouble with my sister, Elaine." He uses TV to annoy her and won't let her watch what she wants -- "just to aggravate her. I like to see her mad." Walter seems a loner, keeping things inside when he's upset. "When I get mad, I just sit in my room and watch TV or listen to music till I calm down." Regarding the children's personalities, Mrs. Costello said all the children take after her because "my husband's grouchy and I'm not."

Mr. and Mrs. Costello seem to lead very separate lives and don't seem to agree on many issues. She doesn't tell him how much money she makes at her job (she works in the laundry room at a local hospital) so she can have some for herself. She would love to get another job because what she does is boring. "But this pays okay and there just aren't other jobs." Her views about working and education are different from her husband's. "All I hear is money, money, money. My husband doesn't know there aren't jobs for the children. He wants them to work, but I don't think they can get enough education." This notion of father wanting children to just go out and work was echoed by Janice.

In the evenings, Mrs. Costello goes to play bingo or visit friends and often stays overnight at a friend's house. Mr. Costello watches TV in the kitchen from 7 p.m. until 2 a.m. The whole family, except Mrs. Costello, watches a lot of TV, particularly Mr. Costello, Walter, and Elaine. Mr. Costello's only show is 'Bowling for Dollars' because she likes to bowl. There are three TV's in the apartment -- one in the kitchen, and two in bedrooms.

Mr. Costello is the one who makes contact with the school. During the first year of our study he contacted Elaine's teacher, concerned about her school work and behavior; he thinks Elaine is having academic problems, while Mrs. Costello does not. The parents do agree that they'd like Elaine to be a nurse because she likes people and is friendly. Says Elaine, "I want to be a mother. All I know is they want me to finish college." Mrs. Costello told us that Elaine thinks that everyone is her friend, whether they are or aren't. She's not scared of nothing," "She's fourteen going on 44." Mrs. Costello recalled that one night she came home from bingo at 10:30 p.m. and Elaine wasn't home; Elaine came in at 10:40, having been out in the courtyard with friends. "She's friends with everyone. I keep showing her articles on murder and rape so she'll see what can happen. I grounded her for a week because of that night, but my husband lets her go." Mr. and Mrs. Costello's attempts to restrict and control their children's activities often seem fruitless.

Elaine has had a long history of school problems. She repeated K and first grade and has been receiving a large part of her instruction outside the regular classroom. During the first year of our study, Elaine received most of her instruction in a resource room at school -- spending time with her 6th grade class only during lunch and gym. Both the classroom and resource room teachers say that Elaine constantly complains about school and hates doing any work. During our observations in the resource room she needed constant prodding and encouragement to complete an assignment. Throughout the period she repeated, "I don't feel like doin' this," "I hate this." "I ain't gonna do all this stuff." During the second year of our study, Elaine was officially mainstreamed into content area classes but was disruptive when she came to them and more often than not cut, roaming the halls, leaving school or returning to the resource rooms.

Elaine's seventh grade teacher describes her as "very disruptive" and says she works in "fits and starts." According to this teacher Elaine constantly tried to get attention from adults and other kids by clowning and shouting out. The teacher who had worked with Elaine felt Elaine's ability level was low and that her maturation seemed especially poor during the second year of our study. She felt Elaine was strongest in reading at literal comprehension -- word attack skills were seen as Elaine's particular weakness.

Elaine's father contacted her teacher the first year of the study regarding her school work and behavior. During the second year of the study, two of Elaine's teachers and the principal contacted Elaine's father a number of times, usually about discipline problems. Elaine's teachers had differing versions on how helpful her family was. One teacher felt "indifference on the part of the Costello's" and that their contribution to her success was negative. Another teacher reported that the Costellos were "very supportive when asked to help, however it does slack off and needs to be renewed." When the teachers talked with Elaine's father they noticed improvement in her behavior and attitude, but only for a brief period of time. Said one teacher, "The effect lasts a day or two but usually no more."

For Mrs. Dixon, 28 a single mother with two sons, Jeffrey, 9, and Lee, 7, their physical surroundings are quite shabby but there is a warm emotional climate and many provisions for the children's reading. They have moved five times in the past six years and "it's really been rough for us at times." When she and her husband separated, four years ago, Mrs. Dixon took a year off from working and she and the boys lived at her mother's. For three years the three of them lived in McCormack Towers (federally subsidized high-rise apartments) in a very sparsely furnished apartment. Before that they lived in two different places in a black neighborhood several miles away.

From ages 2-5 Jason went to day care and a young woman friend of Mrs. Dixon's also took care of the boys. She thought the Towers were a better environment for the kids than were her previous neighborhoods. However, recently they moved to their present apartment in a house that her aunt owns and in which her cousin lives upstairs. It's dark and in poor repair, and there is less space than the family had before. The three of them share a bedroom, whereas in the Towers there were two bedrooms. Yet, there is extended family nearby, including Mrs. Dixon's parents, who stop in regularly and take the boys out.

Mrs. Dixon seems to be the neighborhood switchboard. She receives phone calls from and for friends, takes messages for them, "Grand Central Station" as she says. Family resources are available but life is still not stable for the Dixon's. The phone has been disconnected several times and Mrs. Dixon has a difficult time dealing with some of the everyday stresses.

Mrs. Dixon is an avid reader and it is apparent that her interest is rubbing off on at least her older son Jeffrey. She reads several newspapers every day -- says she got this from her father -- and reads Time, Newsweek, Ebony, Jet, regularly. She brings home some of the news magazines from her office. On the bedroom wall is a poster of a football player (which Mrs. Dixon bought for the boys) captioned "Mean Joe Green says: Team up with you teacher and TACKLE THOSE BOOKS." A calendar and the children's art work also line the walls. Both the bedroom and living room are full of magazines and books, secretarial handbooks, comics and coloring books and old copies of The New York Post.

Mrs. Dixon used to read books a lot but doesn't have much time now. As a teen, she loved books, particularly romance and autobiographies. She attended a suburban parochial high school on a scholarship. She had a difficult time adjusting because she felt alienated from her white suburban classmates and there was no chance for interaction with them. However, after not enjoying her first two years, she "really got something out of the program" her junior and senior years. After high school graduation, she attended a junior college for one year, taking business and secretarial courses before starting to work. She worked as an administrative assistant for a local school district and then at a temporary secretarial agency. She now is the secretary to the president of a small local business. Since there is no chance for advancement at her present job she sporadically looks elsewhere. However, she realizes that she needs more education to get better jobs. Once the boys are older, she plans on going back to college.

She wants both sons to go through college. "Jeffrey would make a good lawyer," but she thinks that a job in the art field will be in his future since he loves to draw and is quite good at it. She feels that school should teach the basics, but "they should bring learning more up to date, with current affairs. Learning stuff about the 1800's isn't so necessary." She has little contact with the school, "too busy" being the reason. Mrs. Dixon is pleased that Jeffrey is doing well in school and that his attitude about school has changed for the better. He "got into school" -- likes to write and read. Jeffrey loves science books and factual books about animals saying, "My father taught me to read." If there are articles in the newspapers about animals, Mrs. Dixon will show them to Jeffrey and discuss them with him. She also still reads to him and Lee.

In second grade, Jeffrey was better prepared in reading than most of his classmates and was "sharp" his teacher noted, but "at times he seemed as if his mind were on something else" and she complained that he needed to be constantly pushed to do things. The teacher had no contacts with Jeffrey's mother and felt that the mother's work schedule got in the way of more contact with the school. She also felt that Jeffrey was not getting much support from the family. According to her, Jeffrey and his younger brother stayed in the house alone on workdays until their mother got home.

In third grade Jeffrey's classroom behavior could be characterized as well-organized, attentive, and competent. Despite these characteristics and Jeffrey's strong reading skills, his third grade teacher felt that he would only graduate from high school.

Jeffrey and Lee spend a lot of time together playing and watching television. TV is a constant presence in this family. Twice when we interviewed, the TV was on and remained on, with the sound turned off. There are two TV sets, a color one in the living room and a black and white set in the bedroom. The boys get to watch the big color set because Mrs. Dixon likes to relax on the bed while watching TV.

Mrs. Dixon indicates that the boys get along very well with each other. However, she contrasts their behavior. Jeffrey is "coming into his own these days." Lee, on the other hand, is the more mischievous of the two. During one of our interviews, Mrs. Dixon sent out Jeffrey to look for Lee; when Jeffrey returned without his brother, Mrs. Dixon said Lee was "going to get it" for staying out after dark. According to their mother, Jeffrey is very mature whereas Lee "is a baddie"; he was kept back in first grade because of his babyish ways (he always wanted to play). "It's my fault that he's babyish -- I baby him -- I hate to let go." In other comparisons of the boys, Mrs. Dixon commented: Lee is quick-tempered while Jeffrey is calmer. "Jeffrey is good with his hands -- he likes to fix things. Nine times out of ten he doesn't put it back right, but he tries. With Lee, if it's broke, well that's it."

Jeffrey is expected to help with chores around the house, emptying the garbage and cleaning the bedroom. He and Lee used to spend some time with their father — going out to the movies or to the ballpark -- but now their father has moved and they're out of touch with him. Jeffrey has been in Little League, an important part of his life. He wants to be a baseball player when he grows up. Also, for three years now, he's been going to a summer camp—that his father attended as a child-- in a nearby state. Lee is also going for the first time this year. Even though they suffer financially and times get rough, Mrs. Dixon wants to do things to provide a nice environment for the boys. The person Jeffrey most admires is his mother: "She is so nice that one day she let me stay up as late as I want so now you know one reason why she is nice." We felt, from our visits to the home and classroom, that Mrs. Dixon is a caring, loving mother and that Jeffrey is a bright, self-assured and nurtured child.

Conclusions

The most striking and encouraging aspect of the findings is the enormously high percentage of variance on the literacy measures that can be explained by the regression models. Furthermore, in some cases most of the variance could be explained using a rather small number of variables - an indication of how powerful the relationships between home and literacy are.

The focus of this research proposal was reading comprehension, and it is for reading comprehension that the relationship to home variables is the most complex. Word recognition and vocabulary, closely related skills especially at the higher grades, are influenced by the cognitively enriching activities some homes provide, and relate strongly to children's time with adults rather than with other children or watching TV. But reading comprehension, though not unaffected by such cognitive enrichment in the home, is less powerfully dependent on it, and is furthermore also related to aspects of the emotional climate in the home. It seems very likely that reading comprehension, more than word recognition or vocabulary, requires complementary supports from home and school - cognitive enrichment in out-of-school activities, the positive self-concept that develops in an emotionally positive home, and direct instruction and time to practice reading skills in school as well.

Finally, the emotional climate of the home is powerfully related to children's word production in the writing task - a measure which correlates highly with both holistic ranking of the quality of the writing samples and the quality of the content of the samples (see Chapter 7). The major determinant of variability in writing, at least within the limits of the rather poor writing skills demonstrated by these children as a whole, is willingness to concentrate and daring to write a lot.

The analyses presented here are, of course, limited in a number of ways. Most important, it would be very useful to perform these analyses in a way that could reflect developmental differences across the age span second to seventh grade. It is very possible that the various regression models would have differential power at the different ages. Unfortunately, our sample size at each age is too limited to permit such an analysis.

Another limitation on the analyses presented here is that we are viewing the effects of the home divorced from the effects of the school - when, in fact, the effects of home and school may be cumulative or may interact in ways that make it impossible to view either separately.

We make a first attempt in the next chapter to relate findings concerning home effects to findings regarding school effects, by looking at the regression models presented here in relation to gains on literacy - the same measures used to assess classroom effects in Chapter 8. Clearly, more extensive steps must be taken to relate the home influences to the school effects, both by further analysis of the data presented in this report, and in collecting new data.

Chapter 9

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Chapter 10: Summary and Implications

In this chapter we will summarize the results of chapters 5 though 9, with attention to the implications of our findings for educators and researchers.

Assessment of Reading, Writing, and Language

The Measures. All tests were administered individually, twice to the same sample--in the first year of the study (May, 1981: the pretests) and again in the second year (May, 1982: the posttests). For the pretests the children were in grades 2, 4 and 6, and for the posttests they were in grades 3, 5 and 7.

The reading tests consisted of six tests of reading and related skills: word recognition, oral reading, phonics, word meaning, silent reading comprehension, and spelling. The test could be scored in terms of total right for each student, as well as a grade equivalent based on norms from a varied population.

Writing was assessed by using two stimuli, one to produce a narrative and one to produce expository writing. The writing samples were analyzed using twelve measures which included ratings and trait scores. These fell into four categories: a) overall measures such as holistic ratings, holistic ranks, and number of words written in 10 minutes; b) syntactic/organizational measures such as organization rating, T-unit length, and sentence length; c) content measures such as rating of content, unfamiliar Spache vocabulary, unfamiliar Dale vocabulary; d) precision measures such as form rating, handwriting rating, and counts of misspellings.

The language assessment included measures of vocabulary, grammar and language awareness, Each of these contained several subtests. For example, the vocabulary test which was based on an administration of the WISC-R was scored for both familiarity and for precision and sophistication of word definition. The grammar measure included four separate syntactic subtests: knowledge of the complex construction of the verb ask; of promise; of although; and turning statements into questions. The four metalinguistic awareness measures were designed to measure children's ability to view language objectively and to formulate judgements about its properties.

The Analysis: Questions concerning the Literacy Measures

Analyses were made separately for the reading, writing, and language tests. These test scores were then entered into a factor analysis to determine the relationships among them.

The first objective of these analyses was to determine the course of development of the literacy and language skills of our population over the grades included in the study, 2 to 7. Do reading, writing, and language (and their various subskills) develop the same way? A related question was whether the reading scores tended to decelerate around grade 4, when reading began to be used for 'learning the new'.

Do the above and below average readers show the same or different trends in development? How are reading, writing and language (and the subtests of these skills) related to each other? Are the relationships the same or different for the total population and for the separate grades?

Questions concerning the Influence of the School

Another series of questions was asked with regard to the possible influence of various classroom, teacher, and instructional variables on the gains in reading, vocabulary, and writing scores during the course of the study. Observations in classrooms and interviews with the sample children's teachers provided data about several different components of instruction, the availability of materials in the classroom, teachers' expectations for and assessment of the children, and the degree of contact between school and home.

Questions concerning the Influence of the Home

Still another series of questions was asked relating to home effects, whether several dimensions of the home--including the literacy environment, the presence of rules and schedules, parental educational level, the level of stress experienced by the family, and the emotional climate of the family--were related to the children's literacy skills. The data used to test for the effects of the home derived from parental interviews, child interviews, observations of the children at home, time-allocation diaries filled in by the children, and observer ratings of various aspects of the home environment.

Findings concerning the effect of both home and school, and their interaction with one another, will be presented after the results on trends and interrelationships of the reading, writing, and language tests.

Reading, Writing, and Language Results

Methods of Analysis. Several kinds of analyses were done to answer the questions outlined above, including a) cross-sectional trends for grades 2, 4 and 6; b) cross-sectional trends for grades 3, 5 and 7; c) gains made by each child between the pretest and the posttest (grades 2 to 3, 4 to 5, and 6 to 7). These separate sets of results were then compared, so that any trends found could be confirmed from both sets of cross-sectional data and from the one-year longitudinal data. Generally, the use of these separate sets of data proved to be constructive. As can be seen in Chapters 6 and 7, the findings on reading, writing, and language produced similar trends.

There were some differences in the composition of the samples from the three grades. The grade 4 sample was larger and seemed as if it might contain a larger number of proficient readers than the other grades, especially the grade 6 sample in which the above average readers scored generally somewhat closer to grade level. We therefore carried out an analysis of covariance, covarying out the effect of the children's third grade reading scores on standardized reading achievement tests (see Chapter 6); this analysis suggested that there was in fact no significant difference among the three groups in terms of their overall reading skills at third grade.

Findings. The findings on longitudinal trends for reading, writing and language are remarkably similar. All three areas show greater gains from grades 2 to 3 and 4 to 5 than from grades 6 to 7.

The cross-sectional scores show similar trends for reading, writing and language. On the pretests, there were greater differences in scores between grades 2 and 4, with a decline between grades 4 and 6. The scores on the posttests show similar trends, with greater differences between grades 3 and 5 than between 5 and 7.

Thus it would appear that reading, writing, and language scores show a similar trend in development, marked by a deceleration on most measures beginning at about grade 4. Although the developmental trends are similar for reading, writing, and for language, there are some differences in rate and extent for the various subtests. For example, the word meaning subtest of the reading test begins to decelerate at grade 4, while oral reading has barely begun to decelerate at grades 6 and 7. But the general trends noted above hold in spite of these variations.

The above-and below-average readers had developmental trends that were similar to one another and to those described above. In actual achievement, though, the difference between the above-and below-average groups increased as the children got older. Thus, in grades 2 and 3 the scores of the above- and below-average readers were relatively close. By grades 4 and 5 they were appreciably different, and by grades 6 and 7 they were considerably different.

The course of development of the below average readers was strongly decelerated, i.e., beginning with grade 4 most of their scores were appreciably below their expected grade level. The above average readers, on the other hand, still were achieving at or above grade level in grades 6 and 7 on all the subtests except word meaning.

The extent of the relation between reading, writing, and language was studied through factor analyses, and by comparing the developmental trends across the three areas. The factor analyses of the reading, writing, and language tests found a definite relationship between reading and writing. Generally, most of the reading tests were related to the two broad writing measures, ratings of content and ratings of form.

Reading and language were related mainly through vocabulary, with all three tests of vocabulary having a strong effect on the silent reading comprehension scores. This relationship was not found for the earlier grades, but was particularly strong at grades 6 and 7.

The relationship between writing and language appeared to be strong, with all three language measures (grammar, language awareness, and vocabulary) related to the writing measures.

Reading and writing also appeared to have separate factors. Separate correlations of the reading and writing subtests indicated that the number and kinds of factors varied with grade. In the lower grades there was a single factor--reading. Beginning with grade 4 there appear to be two or perhaps three factors, a word recognition factor (in context and isolated), a word meaning and comprehension factor, and a precision or decontextualization factor (ability to recognize and define difficult words out of context). The writing measures clustered into several factors--content, form and mechanics.

Implications of the findings from the language and literacy tests.

The most remarkable finding, we believe, is the similarity in the course of development in all three literacy measures, reading, writing, and language. All seem to start off well. (Estimated for reading to be at about grade level or above at the end of grade 2, on the pretests). They show growth between grades 2 and 4, and then decelerate in their development after grade 4. The same trends are found for grades 3, 5, and 7 (the post tests), and the gains on pre- and post-tests.

Indeed, in reading, where it is possible to compare the scores of our sample to the general population of children at these grade levels, our sample does very well in grade 2, scoring as a group above or on grade level. In grade 4 the children are still largely on grade level, but by grade 6 they are, as a group below grade level.

In writing, the children seem to decelerate even earlier, and particularly on form. In content--the quality of the ideas being expressed--they remain high through seventh grade.

Why do these children decelerate after a good start? Later sections on the influences of home and school factors will review developmental effects of children's in- and out-of-school experiences, and perhaps help us to explain the deceleration.

The implications which follow are based on the reading and writing processes--their development and interaction. Let us take the reading tests first. On these tests, word meaning decelerates before the other subskills. The scores on word meaning are the lowest beginning with grade 4, and are lower still in grade 6 in relation to the test norms. (The 2nd graders were .3 grades above the norms, the 4th graders, .5 below the norm, and the 6th graders, 2.4 grades below. Similar scores were found for grades 3, 5 and 7.) Other research has shown that low-income children have lower vocabulary scores than the general population. It would seem, therefore, that a stronger emphasis on word meanings, particularly on the more abstract, literary, and specialized words is needed at grade 4 and higher grades.

Our analyses indicate that knowledge of word meanings in context is probably not sufficient. There is need also for precision and the ability to decontextualize, i.e., to recognize and to define difficult and longer words precisely and abstractly, paying attention to their different meanings. This does not imply changing drastically the present forms of reading instruction in the early grades (See Chapter 8) for these children. They have as a group, achieved an early facility with reading as tested in May of grade 2, and for most, this continues to about grade 4 and even 5. Although word meanings are their lowest scores in grades 4/5 and 6/7 it is important to note that they (both the above-and below-average) scored above grade level on word meaings in grades 2 and 3. Thus these children seem to start off well in word meanings and to hold it to the end of grade 3. Our data further indicates the need for greater vocabulary development at grade 4 and beyond.

When is the best time to provide vocabulary development? Research has yet to determine when the best time is for the school to focus on word meanings (Chall, 1969). Especially with working-class children, it is not clear if it is better to start emphasizing difficult words from the beginning, or to wait until the intermediate grades when such words are needed for reading as indicated by our data.

Our recommendation, therefore, is for experimental tryouts of different possibilities --vocabulary emphasis from the start, or more concentrated emphasis at about grade 4 and beyond, when there is particular need for learning words beyond their oral use and listening comprehension. Our findings also suggest the need for challenging and varied reading materials which will enhance, through context, more advanced word recognition and word meaning, as well as reading comprehension.

The grammar and metalinguistic measures did not relate positively to the reading scores. This may stem from the fact that the materials being read--textbooks and library books from the 2nd to the sixth and seventh grades--contain essentially a simple syntax. Also, almost all readability studies have found syntactic factors generally less predictive of reading comprehension than difficult vocabulary.

Serious study is needed for low-income below-average readers. This study found that they, more than the above-average readers, show early and considerable deceleration. Although their reading is similar to the above-average readers in grades two and three, they test progressively behind the norms as they advance in grades.

It may well be that these below-average readers have come to be seen as typical of low-income readers. When we look at the above-average low-income children, it is clear that they do not decelerate and that they achieve well on all tests, except word meaning, through grade 7.

A study of the low-income below-average readers should include measures of verbal and performance individual abilities and of other measures used for diagnosing children with learning disabilities. It would seem from the developmental trends of our below average readers that initial achievement below national norms tends to avalanche. The longer the child is in elementary school, the greater he falls below grade norms. Thus, catching the first signs of difficulty would seem a first priority for the below-average achievers.

Writing needs more emphasis. Although the writing measures did not convert into grade level equivalents, as did the reading scores, it was fairly clear that the form of the children's writing was considerably below the content. These children had excellent ideas but they could not seem to put them into an acceptable written form. It is of particular interest that the rating of form in the writing samples correlated with the grammar and metalinguistic awareness measures. The spelling and handwriting in the samples were poor across all grade levels. These children need much work on writing and language. With additional writing and language practice, the children will have the opportunity to learn how to express the good ideas that they have.

Results of the Analysis of School Factors

Variables identified during the classroom observations were related to improvements in word recognition, reading comprehension, word meaning, and writing. Several of the classroom factors produced higher gains on several of the literacy and language measures, whereas others had more specific effects on only one or two.

Generally, gains on reading comprehension and word meaning were related to similar classroom factors: a) the availability of a variety of reading materials, including trade books as well as reading textbooks; b) writing book reports; c) visits to the library; d) availability of reading materials of sufficient difficulty; e) and vocabulary practice that was challenging in relation to the students' reading achievement and knowledge. The quality of instruction was strongly associated with gains on both reading comprehension and word meaning. Vocabulary growth was associated with writing in class and with field trips, and comprehension gains were associated with the provision of comprehension strategies, and with an instructional focus on critical thinking and reasoning.

The factors affecting word recognition overlapped to some extent with those affecting comprehension and word meaning. For example, the level of difficulty of the reading texts was related to all three. Word recognition also showed gains in classrooms where students were reading textbooks that were challenging, in comparison to their reading level. Visits to the library and teacher reports that writing and comprehension were emphasized also related to both reading measures and to word meaning. Word recognition gains were not related to the use of a variety of books, to writing book reports, or to teacher emphasis on creative writing.

The classroom factors related to gains in writing were similar to those affecting comprehension and vocabulary: a high level of instruction characterized by teacher explanations, considerable levels of challenge to the students, and much student involvement in learning. Other factors were unique to writing: frequency of writing in class, assignment of creative writing, assignment of homework involving writing, little use of workbooks that require filling in of words rather than writing sentences.

Results of the Analysis of Home Factors

Several home factors emerged as powerful predictors of children's literacy skills. As for the classroom factors, the patterns of relationship varied for the various literacy measures, and for the various grade levels as well.

Maternal aspirations for children's education, maternal literacy, frequency of children's outings with adults, and financial stress on the family all related to both word recognition and reading comprehension. Word recognition was also related to maternal education and to frequency of maternal activities, whereas reading comprehension was higher if children's homes provided more literacy materials and experiences, if children spent less time watching television, and if the quality of children's relationships with adults was good. The results suggest that, whereas adequate word recognition skills are sensitive to the presence of adults with certain levels of literacy in the home, development of adequate reading comprehension skills benefits from spending time reading (rather than watching TV) and from having literacy materials available that are child-oriented and interesting for the child.

The vocabulary measure clearly reflected the benefits of varied activities and of access to supportive and interesting adults in improving children's knowledge of words. Significant relationships were found with maternal aspirations and expectations for the child's education, frequency of outings with adults, quality of relations with adults, maternal literacy, frequency of maternal activities, and the family emotional climate. At all grades, children learn vocabulary from talking to and doing interesting things with adults they like.

The measure of writing showed the strongest relation to emotional, rather than cognitive, aspects of family life--emotional climate and level of organization in the home. It may well be that, given that the children in this sample were more greatly differentiated on content than on formal aspects of writing, the home can work primarily to build a self-confident, emotionally stable child who dares to put his thoughts on paper. Formal aspects of writing may need to be taught explicitly at school.

Developmental differences in the impact of the home factors were apparent. Most striking was the increasing importance of maternal literacy as the children got older, and the greater positive impact of contacts with adults and negative influence of television on younger children.

In order to test more fully the relationships among the home factors, five regression models incorporating the most highly predictive variables were compared. Two models which emphasized the cognitive contribution of the home, the 'Parent as Teacher' and 'Home as Enriching' models, explained 44-60% of the variance on both word recognition and vocabulary, underscoring the sensitivity of these measures to home influences, and their similarity to one another in the nature of the influences. The writing measure was best explained by the two models emphasizing the emotional aspects of the home, 'Home as a Nice Place' and 'Home as a Negative Environment'. Reading comprehension was hardest to explain and the most mixed in terms of the models that explained it. The Parent as Teacher model and the Home as a Nice Place model each explained 28% of the variance on reading comprehension; this was the only literacy measure that was sensitive to both cognitive and emotional models, and the only one in which so little of the variance was explained.

Home and School

The home and the school have both been shown to be powerful in explaining children's literacy skills. The interaction between home and school was also found to be of great importance in explaining children's literacy skills. Parents and some of the teachers had rather different views of the children's potential for future achievement, and parents tended to overestimate their children's academic skills. Parents viewed talks with teachers as important when the children were having academic problems, whereas teachers contacted parents primarily concerning behavioral problems.

The gap between parents' and teachers' views was most effectively bridged in those cases where they had frequent contacts with one another. Contacts with parents increased teachers' expectations for the children, and affected the children's likelihood of making gains in reading. Yet, such contacts often did not occur precisely because the parents were receiving information suggesting that their children were performing adequately in school, and thus did not initiate contacts with the teachers. Since some teachers were not likely to initiate contact with parents simply because their children were performing below grade level, children could slip down in achievement without any remediating contact between parent and teacher being made. The teachers who contacted the parents of all the children frequently had better impressions of the helpfulness of the families, and were more likely to see their students making gains in reading.

Conclusion

Clearly, neither home nor school is entirely responsible for children's failure to achieve adequate levels of literacy. Either home or school can, in the absence of much positive influence from the other, provide the basis for considerable growth in reading, writing, and language skills. The fortunate children from enriching homes with a positive emotional climate, who also spend time in classrooms that foster the development of reading, writing and language, have the opportunity to develop their literacy potential to the fullest. However, many children whose home environments are less than optimally enriching or positive can still achieve adequate literacy if they attend classrooms where the quality of instruction is high, where the materialsare varied and challenging, and where vocabulary and writing are taught explicitly. Similarly, children from enriching and emotionally stable homes can survive a few years of uninspired teaching and unchallenging school activities without disastrous effects on their literacy skills. It is only if children's homes and their schools both fail to provide a minimum of enrichment, challenge, emotional support, and instruction that they are greatly at risk for failure. To the extent that low-income children such as those in our sample are more likely than middle-income children to come from homes with high levels of stress, with few or inadequate literacy materials and models, where access to activities with adults is limited because of lack of money or time--to that extent we are obliged to provide such child[illegible]h more enriching, more stimulating, more challenging classroom experiences.

Reference

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APPENDICES

A: Complete Summer and Winter Diary Forms

B: Symlog Rating Form

C: Parent Interview

D: Child Interview

E: Teacher Questionnaire Form

F: School Biography Form

G: Narrative and Expository Stimuli for Writing Sample

H: Correlations between Home Factors and Literacy Measures

APPENDIX A: SUMMER DIARY

Name____ Day____________________

Please write down everything you did from the time you go up until you went to bed. Put 'woke up' next to the time you woke up, and start from there. Try to fill it in before you go to bed, so you don't forget all the things you did. Please mail these to us when you have finished all four days.

MORNING	What were you doing?	Where were you?	Who were you with? (mother, father, brother, sister, friend adult friend, relative, by yourself)
6:00			
6:30			
7;00			
7:30			
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			
11:00			
11:30			
12:00			
12:30			
1:00			

Day____________________

AFTERNOON	What were you doing?	Where were you?	Who were you with?
1:00			
1:30			
2:00			
2:30			
3:00			
3:30			
4:00			
4:30			
5:00			
5:30			
6:00			
6:30			
7:00			

Day ____________________

EVENING/NIGHT	What were you doing?	Where were you?	Who were you with?
7:00			
7:30			
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			
11:00			
11:30			
12:00			
12:30			
1:00			

Name ______________________________ Day ____________________

Please put a check in the box next to anything you did today.

At home

- make things ☐
- play games ☐
- do chores ☐
- babysit ☐
- play with dolls, stuffed animals, puppets ☐
- play with toys ☐
- play dressup ☐
- cook ☐
- play school ☐
- play store ☐
- practice an instrument ☐
- draw ☐
- write ☐
- sleep ☐
- watch TV ☐
- read ☐
- play with a pet ☐
- take a bath ☐
- talk on the telephone ☐

Play outside

- play ball ☐
- go to playground ☐
- ride a bike ☐
- rollerskate ☐
- play games like tag, jumprope, or superheroes ☐
- play with a pet ☐

- Go to visit relatives ☐
- Go to a friend's house ☐
- Go to the Square ☐
- Go to the corner store ☐
- Go out to do errands ☐
- Go shopping ☐
- Go to a museum ☐
- Go to day camp ☐
- Go to lessons ☐
- Go swimming ☐
- Go to a movie ☐
- Go to the doctor ☐
- Go to Little League ☐
- Go to the Y, the Youth Center, or a Rec Center ☐
- Go to church ☐
- Go to work with mom or dad ☐
- Go in the car ☐
- Go on a bus or the T ☐

APPENDIX A: WINTER DIARY

Name________________________ Day____________________

MORNING

	What were you doing?	Where were you?	Who were you with? (Mcther, father, brother or sister, friend, adult frien relative, or by yourself)
6:00			
6:15			
6:30			
6:45			
7:00			
7:15			
7:30			
7:45			
8:00			
8:15			
8:30			
8:45			
9:00			
9:15			
9:30			
9:45			
10:00			
10:15			
10:30			
10:45			
11:00			
11:15			
11:30			
11:45			
12:00			
12:15			
12:30			

Name ____________________ Day ____________________

AFTERNOON

	What were you doing?	Where were you?	Who were you with? (Mother, father, brother or sister, friend, adult friend, or by yourself)
12:45			
1:00			
1:15			
1:30			
1:45			
2:00			
2:15			
2:30			
2:45			
3:00			
3:15			
3:30			
3:45			
4:00			
4:15			
4:30			
4:45			
5:00			
5:15			
5:30			
5:45			
6:00			
6:15			
6:30			
6:45			

Name______________________________ Day______________________

EVENING/NIGHT

	What were you doing?	Where were you?	Who were you with? (Mother, father, brothe or sister, friend, adult friend, relative or by yourself)
7:00			
7:15			
7:30			
7:45			
8:00			
8:15			
8:30			
8:45			
9:00			
9:15			
9:30			
9:45			
10:00			
10:15			
10:30			
10:45			
11:00			
11:15			
11:30			
11:45			
12:00			
12:15			
12:30			
12:45			
1:00			

Name________________________ Day____________________

Please put a check in the box next to anything you did today.

At Home

☐ Make things
☐ Play games
☐ Do chores
☐ Babysit
☐ Play with dolls, stuffed animals, or puppets
☐ Play with toys
☐ Play dressup
☐ Cook
☐ Play school
☐ Play store
☐ Practice an instrument
☐ Draw
☐ Write
☐ Take a nap/rest
☐ Watch T.V.
☐ Read
☐ Take care or play with pet
☐ Take a bath/shower
☐ Talk on the telephone
☐ Do homework
☐ Have a friend over
☐ Have a talk with mother
☐ Have a talk with father
☐ Have a talk with brother
☐ Have a talk with sister

☐ Play ball
☐ Ride a bike
☐ Rollerskate, iceskate
☐ Play games like tag, jumprope, or superheroes
☐ Play with a pet
☐ Go to playground
☐ Go to visit relatives
☐ Go to a friend's house
☐ Go to the Square
☐ Go to the corner store
☐ Go out to do errands
☐ Go shopping
☐ Go out to eat
☐ Go to a museum
☐ Go to lessons
☐ Go swimming
☐ Go to a movie
☐ Go to watch a game, sports event
☐ Go to play soccer, football or other game
☐ Go to doctor
☐ Go to the Y, Youth Center, Rec Cente
☐ Go to church/Sunday school
☐ Go to work with mom or dad
☐ Go to babysitter's
☐ Stay at school for after-school program
☐ Go in the car
☐ Go on the T or on a bus
☐ Go on excursion

Name_____________________________ Day___________________

Please put a check in the box next to anything you did at school today.

☐ Have reading group
☐ Do math
☐ Have social studies
☐ Have language arts
☐ Have science
☐ Do spelling

☐ Have music
☐ Have physical education
☐ Have art
☐ Have health

☐ Eat lunch
☐ Have recess
☐ Go on field trip
☐ See a movie
☐ Have assembly
☐ Play an outdoor game

☐ Visit the school library
☐ Read to yourself for fun
☐ Listen to the teacher read
☐ Fill in blanks in a workbook or on a worksheet
☐ Practice handwriting
☐ Copy things over

☐ Write a story or play
☐ Write a composition
☐ Draw pictures
☐ Act out a part in a play
☐ Give a report
☐ Have show and tell
☐ Do a puzzle or word game
☐ Write a letter

☐ Read outloud in a group
☐ Take a test
☐ Do homework
☐ Play an instrument
☐ Go to resource room
☐ Be tutored

APPENDIX B: SYMLOG RATING FORM

NAME ______________________________

(0)Not Often (1)Sometimes (2)Often

		TARGET	OTHER	OTHER
U	seemed active, dominant, talkative			
UP	seemed extroverted, outgoing, positive			
UPF	acted as a purposeful democratic leader			
UF	acted as an assertive business-like manager			
UNF	seemed authoritarian, controlling, disapproving			
UN	seemed domineering, tough-minded, powerful			
UNB	seemed provocative, egocentric, showed off			
UB	joked around, seemed expressive, dramatic			
UPB	seemed entertaining, sociable, smiling warm			
P	seemed friendly, equalitarian			
PF	showed agreement, worked cooperatively			
F	seemed analytical, task-oriented, problem solving			
NF	seemed legalistic, insistent, had to be right			
N	showed disagreement, seemed to be negativistic			
NB	seemed irritable, cynical, uncooperative			
B	showed feelings and emotions			
PB	seemed affectionate, likeable, fun to be with			
DP	seemed to look up to others, showed trust			
DPF	seemed gentle, willing to accept responsibility			
DF	seemed to work submissively			
DNF	seemed to be self punishing, worked too hard			
DN	seemed depressed, sad, resentful			
DNB	seemed alienated, withdrew from task and group			
DB	seemed afraid to try, doubtful of ability			
DPB	seemed quiet but happy just to be with others			
D	seemed passive, introverted, untalkative			

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Subject____________________

APPENDIX C: PART I

MATERNAL INTERVIEW

MASTER CODING COPY

(2nd Edition)

Maternal interview administered by____________________

date____________________

coded by____________________

date____________________

I. HOUSEHOLD & NEIGHBORHOOD

A. Size of household

1. Ms._____, I would like the full name, the ages and the sex of each person who lives here and the relationship of each of these individuals to you.

fig# 1

NAME	SEX	AGE	RELATIONSHIP TO INTERVIEWEE

Card #1
Color

b ___ ___ [1-
Card ID   K'D ID

2. Are you primarily responsible for the upbringing of all children names above? _____ [4
   (1) Yes
   (2) No
   If no:
   a. ~~Which~~ How many children are you not primarily responsible for? (Note: put an asterisk next to these names in fig. #1) _____ [5
   (POSTCODE) b. With whom do you share the responsibility of upbringing for the above? _______________ _____ [6

3. Are all children named in fig. #1 above financially dependent on you? _____ [
   (1) Yes, fully
   (2) Yes, partially
   (3) No

   If no: How many children are not at all dependent on you? (Note: Put asterisk next to these names in Fig. 1) (If yes, fully or partially, answered above, code (0) here) _____ [8

B. Language

1. Do you or does any one else in this household usually speak any language other than English? → _____ [9
   (1) Yes
   (2) No
   If yes:
   Which language? [If no to above, following are 0] _____ [10
   a. Is _______ spoken to in this language? _____ [11
   (1) Yes (2) No
   b. Which language does _______ speak the most at home?
   (1) English (2) Other (3) Both
   c. Which language does _______ speak with his/her friends? _____ [12
   (1) English (2) Other (3) Both

②

II. HOUSE AND SURROUNDINGS - NEIGHBORHOOD

(Note: Interviewer to complete this section on the basis of his/her observations.)

A. Type of dwelling--is dwelling a:
(1) ____ single house, one family, detached or semi-detached
(2) ____ duplex or row house, one unit for each family
(3) ____ converted single house, converted row-house, multi-family
(4) ____ apartment privately owned, garden type
(5) ____ apartment public housing, garden-type housing project
(6) ____ apartment privately owned, multi-story type housing project
(7) ____ apartment public housing, multi-story housing project
(8) ____ trailer
(9) ____ single house collective
(10) ____ other (specify)

Colun

____ [13]

B. Is respondent's house:
(1) ____ on the corner
(2) ____ in the middle of the block
(3) ____ not applicable

____ [14]

C. Are surrounding houses:
(1) ____ like respondent's house ____ [15]
(2) ____ different from respondent's house
[POSTCODE] If 2, then how? (include info in write-up) 0 [16]

D. Are there sidewalks or spaces between the yard or house and the street?
(1) ____ more than 8 ft. in width
(2) ____ 4 1/2 to 8 ft. in width
(3) ____ 4 ft. or less in width
(4) ____ no sidewalks

____ [17]

E. Is the outside of respondent's house:
(1) ____ new (built within last 25 yrs.) in good repair
(2) ____ new, in poor repair
(3) ____ old (built over 25 yrs. ago) in good repair
(4) ____ old, in poor repair

____ [18]

F. Does respondent's house or apt have a yard? (enclosed)
(1) Yes
(2) No

____ [19]

G. Does there seem to be adequate outside play space available?
(1) Yes
(2) No

____ [20]

H. I'm going to read a list of things that may be available to children in a particular area. Listen to each and tell me if it is available to your child(ren) within a ten block radius of home, within walking distance, or not available at all.

	(9) didn't ask	(1) WITHIN A TEN BLOCK RADIUS OF HOME	(2) NOT WITHIN WALKING DISTANCE	(3) DO NOT KNOW IF IS AVAILABLE	(4) IS NOT AVAILABLE	Column
nursery school or day-care center						
clinic						
hospital						
summer day camp						
after hour school program						
teen center						
public library						
public playground (with equipment & space for children of all ages)						
public parks for adults and children						
art gallery						
museum (science, history, art or other)						
live theatre (where plays, puppet shows are given)						
auditorium where music or speecher can be heard						
zoo						
movies						

Colum

I. If you had a friend who lived in another city, and he/she asked you for your advice, would you recommend that he/she move to this neighborhood?
(1) Yes
(2) No
(3) Don't know ______ [36]
If yes or no give reasons. ([illegible]) ______ [37-3
(postcode) ______

J. If one of your children needed help, and you weren't around, could he go to most of his neighbors and expect to get it?
(1) Yes
(2) No
(3) Don't know ______ [39]

III. CHILD'S PHYSICAL SPACE

A. Does ________ have his/her own:
1. room Yes=1 No=2 ______ [40]

B. Does anyone usually sleep in the room with ________?
(1) Yes
(2) No ______ [41]
If yes:
1. Who usually sleeps in the room with ________? if noone, code NA (0)
(1) ____ don't know
(2) ____ no one--child sleeps alone
(3) ____ child(ren) of same sex
(4) ____ parent(s) or caretakers ______ [42]
(5) ____ child of opposite sex
2. How many bedrooms are there in this house (or apartment)?
(1) ____ one
(2) ____ two
(3) ____ three
(4) ____ more than three ______ [43]

Color

IV. STABILITY OF HOUSEHOLD

A. During the past two years, was there anyone living with you who is not with you now? ____ [4

(1) Yes
(2) No

If yes, ask: Could you give me the age, relationship to you, and sex of each? Please be sure to include any individuals who might have died or child who might have left in the past two years.

If yes, how many? ____ [45

AGE	RELATIONSHIP TO RESPONDENT	SEX	REASON

1. (If the child left under unpleasant circumstances ask:) Has this occured more than once with any child? ____ [4
   (1) Yes
   (2) No
   (If answer is "yes" put one asterisk next to the child's name in fig. #2 for each occurence.)

2. Do you have any children living away from you now? ____ [4
   (1) Yes
   (2) No

3. During the past two years, have you lost custody of any children? ____ [4
   (1) Yes
   (2) No

4. Is your home rented or did you buy it? ____ [4
   (1) ______rented
   (2) ______bought

5. How long have you been living there? ____ [5
   (1) ______less than one year
   (2) ______one to three years
   (3) ______three to five years
   (4) ______five to ten years
   (5) ______longer than ten years

6. How long do you expect to keep living there? ____ [5
   (1) ______less then one year
   (2) ______one to three years
   (3) ______three to five years
   (4) ______five to ten years
   (5) ______longer then ten years

Colum:

7. How long did you live in your last place of residence? ________ 5.

(0) _____ not applicable (e.g. same house)
(1) _____ less than one year
(2) _____ one to two years
(3) _____ two to five years
(4) _____ five to ten years
(5) _____ longer than ten years

8. Was it in this same neighborhood? ________ 53

(0) _____ not applicable
(1) _____ Yes
(2) _____ No

If no, how far away was it? ________ 54

(1) _____ another country
(2) _____ another state
(3) _____ another town in same state
(4) _____ another municipality in greater Boston
(5) _____ Cambridge, but different neighborhood

Colm.

V. MOTHER'S PERCEPTIONS OF THE CHILD'S ADJUSTMENT & PERSONALITY

A. Health—Physical

1. Does ____________ have any handicaps or chronic health problems? ______ [55

   (1) Yes

   What kind? ____

   ____

   Any others? ____

   ____

   (2) No

2. Does ____________ take any prescribed medicine or drugs regularly? ______ [56

   (1) Yes

   What sort, how long, why? ________________________

   ____

   (2) No

3. How many times has your child been hospitalized since birth? __________ ______ [57

4. When was his/her most recent hospitalization? __________ ______ [58

   (0) N.A. (1) last 6 mos (2) last 2 years (3) last 5 years (4) earlier

5. How long was his/her longest stay in the hospital? __________ ______ [59

   (0) N.A. (1) 1 -3 days (2) 4 -5 days (3) 6-8 days (4) longer

6. In comparison to other children of ____________'s age, how healthy would you say he/she is? __________ ______ [60

   (1) ______ quite healthy

   (2) ______ fairly healthy

   (3) ______ fairly unhealthy

   (4) ______ quite unhealthy

7. In comparison to other children of ____________'s age, how often does he/she have accidents or injuries to himself/herself? ______ [61

   (1) ______ quite often

   (2) ______ fairly often

   (3) ______ not too often

   (4) ______ hardly at all

8. Does ____________ have any psychological or emotional problems? ______ [62

   (1) Yes

   What kind of problems? (include in write-up) ______ 0 [63

   ____

   [postcode] If yes → Has he/she received help for this problem? ______ [64

   (1) Yes

   (2) No

   What sort of help? (include in write-up)

   [postcode] → ____

   (2) No ______ 0 [65

B. Comparing ____________ with most children his/her age, I would like you to tell me if he/she:

(Interviewer: Read each item. If difficulty is experienced in obtaining answers specified, say: "It is important in your answers to bear in mind that even if you feel that your child is "average" or "like other children in general" it is possible to answer each question "yes" or "no". If response is "no" ask: "Like most children (poorer, younger, etc.) as appropriate to question. 'If response is 'In some things' ask respondent to specify.)

Code:
(1) Yes
(2) No Average
(3) No Opposite
(4) In some things specify
(5) Don't know

Colum

1. Express himself/herself better than most children his/her age. ______ [6
2. Acts older than most children his/her age. ______ [6
3. Cries more than most children his/her age. ______ [68
4. Is easier to get along with than most children his/her age. ______ [6
5. Has more temper tantrums than most children his/her age. ______ [7

6. Asks more questions than most children his/her age. ______ [7
7. Stays by herself more than most children his/her age. ______ [7
8. Is more active than most children his/her age. ______ [7
9. Is afraid of more things than most children his/her age. ______ [7
10. Is happier than most children his/her age. ______ [7

C. When ____________ went to the first grade, did you think he/she had more or fewer problems than most children getting used to school? ______ [76
(1) ______fewer
(2) ______about average
(3) ______more
(4) ______don't know

1. Compared to other kids ____________'s age, how many friends does he/she have? ______ [7
(1) ______more than average
(2) ______about average
(3) ______less than average
(4) ______don't know.

Column

2. Are his/her friends ______ [78
   (1) older,
   (2) younger,
   (3) or the same age
   (4) all of the above

3. Compared to other kids ____________'s age, how well does he/she seem to get along with children his/her own age?. ______ [79
   (1) ______better than average
   (2) ______average
   (3) ______below average
   (4) ______don't know

4. How well does he/she get along with younger kids? ______ [80
   (1) ______better than average
   (2) ______average
   (3) ______below average
   (4) ______don't know

CARD C

C ___ ___ [1-
Card ID Kid ID

5. How well does he/she get along with older kids? ______ [4
   (1) ______better than average
   (2) ______average
   (3) ______below average
   (4) ______don't know

6. How well does he/she get along with adults? ______ [5
   (1) ______better than average
   (2) ______average
   (3) ______below average
   (4) ______don't know

7. Speaks as well as other children his/her age? ______ [6]
   (1) ______better than average
   (2) ______average
   (3) ______below average
   (4) ______don't know

D. Now I'd like to have you rate ____________ on each of the following questions. (Read response choices 1-4 for each item.)
Code:
(1) Very much/good
(2) Pretty much/good
(3) Not so much/good
(4) Not at all
(5) Don't know

1. Generally speaking, how would you rate ____________'s overall independence? ______ [7
2. How hard do you feel ____________ tries to do well or win in sports or games? ______ [8
3. How popular is he/she with other children his/her age? ______ [9
4. How well does ____________ do in sports or games? ______ [10

Col.

5. How much leadership does ____________ show with other children his/her age? That is, organizing or suggesting games or projects? ______ [11]

6. How well is ____________ able to keep his/her mind on what he/she is doing until he/she finished something you ask him/her to do? ______ [12]

7. How well is ____________ at getting grownups to help him/her if he/she doesn't know how to do something? ______ [13]

F. Behavior Problems

1. Has ____________ had a problem that resulted in your being called by school or included his being suspended or expelled? ______ [14
   (1) Yes, problem. Called but not suspended.
   (2) Yes, suspended.
   (3) Yes, expelled.
   (4) No

   If yes:
   Number of times? ______ (15
   When? (Most recent) ______ [16
   (1) This year
   (2) Last year
   (3) Year before

   Why? ______ [17
   (1) Fight
   (2) Property destruction
   (3) Impudence to authority

2. Has ____________ ever run away from home? ______ [18
   (1) Yes
   (2) No

3. Has ____________ ever been in trouble with the Law? ______ [19
   (1) Yes
   (2) No

4. Siblings' adjustment
   a. Do any of ____________'s brothers or sisters have trouble in the school? ______ [20
      (1) Yes
      If yes: code # sibs ____________ ______ [21
      ____
      If yes: What sort of trouble? ______ [2
         (1) ____ behavioral
         (2) ____ academic
      (2) No
   b. Do any of ____________'s brothers or sisters have any (1) handicaps (2) chronic health problems, or (3) psychological problems? ______ [2
      (1) Yes
      If yes: Code # sibs ____________ ______ [2
      If yes: What sorts of problems? (Code from above) ______ [2
      ____
      ____
      (2) No
   c. Have any of ____________'s brothers or sisters been in trouble with the police? ______ (2
      (1) Yes
      (2) No ______ [2
      If yes: Code # sibs

VI CHILD REARING PRACTICES AND ATTITUDES

A At what age do you think _____ should be able to do the following things?

CODE: Cols 1 & 2: Age given in years
Col 3: (0) no information is available regarding reality
(1) parent says child is/was delayed with reference to reality
(2) parent says child is/was accelerated with reference to reality
(3) child on target with reference to reality

Colu

1. Take public transportation alone? 28-
2. Stay in the house alone for a couple of hours? 31-
3. Settle by himself an argument with an older brother or sister, or older cousins? 34-
4. Read books alone without your help? 37-
5. Take part in your adult interests and conversation with friends? 40
6. Make his/her own dinner? 43-
7. Stand up for his/her rights with other children? 46-
8. Take care of younger children? 49
9. Go to entertainment events for the general public alone? 52
10. Know how to behave in company? 55
11. Earn his own spending money? 58
12. Have real household chores? 61

B. In different households, different issues are likely to be the topic of much discussion between parents and children. How often do you and your child have discussions about the following issues? If infrequently, probe for reason (child not interested? Rules, therefore no need to discuss?)

Col 1: (1) Very often (2) Sometimes (3) Once in a while (4) Hardly ever/never (5) Don't know
Col 2: (1) Parent decides, (2) collaborative decision, (3) child decides

1. Discussion about how often _______ can watch T.V. 64
2. Discussion about how _______ will spend money he/she has been given. 66
3. Discussion about children he/she plays with. 6
4. Choice of clothes to wear. 7
5. Decision on what time _______ should go to bed. 7

VII. Child Care

Column

Now I'm going to ask you some questions about help you may get in caring for your children. (If TC is too old for questions to be relevant, ask in reference to younger sibling. If no younger siblings, ask in reference to TC during preschool years.)

Code: (1) TC now (2) sibling(s) (3) TC earlier ______ [74

1 Does anyone other than yourself regularly care for your children on days when you are out, for example, at work, etc. ______ [75

(1) Yes (2) No

If yes, who? ______________________________

____

____

Code most frequent, regular child care source:

(1) A relative
(2) Friends
(3) Neighbors
(4) Husband/partner
(5) Child's older sibling
(6) Family daycare mother
(7) Other babysitter
(8) Group daycare
(9) Child's father (non-resident)

[10] If other: Who? ______________________ ⌊__⌊__⌋ [76-

2. How old was ____________ when child care began? ______ [78

3. Is this child care arrangement still operative? ______ [79

(1) Yes (2) No

Is this care... ______ [80

(1) _____ in your home
(2) _____ in someone else's home
(3) _____ in a facility or institution

CARD d

⌊ d | 1 | 1 ⌋ [1-

4. How many hours per week not including overnights (10pm-7am) does this person or program take care or your child? ⌊__⌊__⌋ [4-

5. Does this include regular overnights? (1) Yes (2) No ______ [6

If yes: How many overnights per week? ____________ ______ [7

6. Does this person or program take care of your child when you're at work? (1) Yes (2) No ______ [8

7. Do you pay for this? (1) Yes (2) No ______ [9

8. How satisfied are you with this kind of child care? (1) Very satisfied (2) Not satisfied (3) Somewhat satisfied ______ [10

[postcode] Why? ______________________________ ______ [11

9. Does anyone else regularly care for your children Monday through Friday? (1) Yes (2) No ______ [12

If yes: Who? ______________________________ ⌊__⌊__⌋ [13

(Code as above. VII 1.)

11. Does this care take place... ______ [15
(1) In the home
(2) In someone else's home
(3) In facility or institution

12. How many hours per week not including overnights (10pm-7am) does this person or program take care of your child? ______________________ ☐☐ [16-17

13. Does this include regular overnights? ______ [18
(1) Yes (2) No
If yes: How many overnights per week? ______ [19

14. Does this person or program take care of your child when you are working? (1) Yes (2) No ______ [20

15. Do you pay for this? (1) Yes (2) No (3) Partially ______ [21

16. Does anyone care for your child on weekends? ______ [22
(1) Yes (2) No

17. Who is usually home when __________ comes home from school? ______________________ ______ [23
(0) Nobody
(1) Respondent
(2) Sibling(s), older
(3) Parent (other)
(4) Babysitter
(5) Non-resident relative
(6) Other resident adult
(7) Younger sibling(s)
(8) Entire resident family
(9) Older and younger siblings

Who else is present? (code from above) ______ [24

18. What about supper? Who usually eats supper with ______? ______ [25
(code as in 17 above)

Who else is present? (code from above) ______ [26

19. Does ______________ have a close relationship with anyone besides you? (1) Yes (2) No ______ [27
If yes: Who? What do they do together?

Relationship of Person Close to Child	What they do together	*Col. 1* Who	*Col. 2* 1) Male 2) Female 3) Both	
______	______	______	☐☐	[28-
______	______	______	☐☐	[30-
______	______	______	☐☐	[32-
______	______	______	☐☐	[34-

Code:
(1) Sibling
(2) Father (non-resident)
(3) Resident male
(4) Other adult
(5) Other child
(6) Grandparents
(7) Aunts/Uncles
(8) Cousins
(9) Resident father

Special persons are: (1) Male (2) Female (3) Male and Female ______ [36

Co

20. (not asked, but coded)
For coupled women: Is your (husband) the father of
________________ (target child)? (1) Yes (2) No ______ [37

21. Does ________________ (target child) see his/her father?
(0) N.A. (1) Yes (2) No ______ [38

If yes: How often does she/he see her/his father? ______ [39
(0) N.A.
(1) 2-3 times a week
(2) once a week
(3) 2-3 times a month
(4) once a month
(5) summer or holidays, only
(6) rarely

22. What do they do together? ________________________________ (40-4
____

B. Note: Code responses as follows:
(1) Very easy (2) Somewhat easy (3) Not so easy
(4) Not at all easy (0) N.A.

______1. If you needed to take __________ to the doctor or to see your child's teacher during your usual working hours, how easy would it be for you to do this? ______ [43

______2. When your children or family need to get in touch with you at work, how easy is it for them to talk with you? ______ [44

______3. If ____________ were sick for one day, how easy would it be for you to make other child care arrangements? ______ [45

______4. What would you do? ________________________________ ______ [4
____

Code:
(1) Stay home
(2) Take child to work
(3) Leave child with husband or friend
(4) Leave child with relatives
(5) Leave child with babysitter
(6) Leave child home alone
(7) Other

XVIII. CHILD'S DAILY ROUTINE AND EXPERIENCE--OUT OF SCHOOL

Col'n

A. Preferred Activities and Daily Schedule

1. How does ____________ spend most of his/her time? ________ [47
(If more than one mentioned, ask: "Which one most," and circle.)
1. watches T.V.
____2. follows mother around
____3. plays by himself
____4. plays with other children in the neighborhood
____5. plays with brothers and sisters or other relatives
____6. other-specify ____________________
____7. don't know

2. How active is this child? ____________ ________ [48
(1) Very (2) Average (3) Below average

3. Where does ____________ usually play? (check one) ________ [49
1. indoors
____2. outdoors

4. What kinds of things does he/she play with most? ________ [50
(Code from B, below)

5. Does child take lessons for: (1) piano (2) guitar (3) roller skating (4) ice skating (5) other mus.inst. (6) dancing (7) other. (1) Yes (2) No (Col.1) ________ [51]
If yes, which? (Col.2) ____________________ (allows for 2) |__|__| [52-

6. About how many hours when he/she is awake, is ____________ usually with you during the day?
a. school days ______ ________ (54
b. non-school days ______ ________ [55]

[postcode] 7. During the time he/she is with you, what are you usually doing? ____________________ |__|__|__|__| [5-

B. Children have different things to play with. Which of the following sorts of things does your child have? (1) Yes (2) No (3) Don't know: If yes in col. 1, then col. 2: (4) Likes a lot (5) likes somewhat (6) not particularly interested. If (No) or (Don't know), then (0) col. 2.

1. Puzzles or puzzle-like toys |__|__| [60-
2. Toys that require working with his/her hands, such as blocks, sewing materials, model building kits |__|__| [62-
3. Drawing, painting material |__|__| [64-
4. Active playtoys such as balls, skates, bicycle |__|__| [66-
5. Board games |__|__| [68-
6. Books |__|__| [70-
7. Musical instruments |__|__| [72
8. Records and tapes |__|__| [74
9. Writing material |__|__| [76

Column

C. Does your child own (or share with sibs) any of the following:

(1) Yes (2) No

(1)________ radio ________ 7

(2)________ t.v. set ________ 7

(3)________ record player and/or tape recorder ________ 8

D. Now, I'd like to ask you some questions about your child's daily schedule on weekdays and weekends. CARD e

Are there certain things that your child does at nearly the same time every day or nearly everyday? (Same time means within a half hour.)

e | | 1

CARD ID KID ID

	Events	School Days	Other Days
1.	Getting up	(1)Y (2)N	(1)Y (2)N
2.	Getting off to school	(1)Y (2)N	(1)Y (2)N
3.	Getting to non-school actvs.	(1)Y (2)N	(1)Y (2)N
4.	Watching t.v. (i.e., does s/he watch certain progs.?)	(1)Y (2)N	(1)Y (2)N
5.	Getting together with frnds.	(1)Y (2)N	(1)Y (2)N
6.	Going to bed at night	(1)Y (2)N	(1)Y (2)N
7.	Eating meals	(1)Y (2)N	(1)Y (2)N
8.	Doing homework	(1)Y (2)N	(1)Y (2)N

19-

(post code) Are there other things that your child does pretty much on schedule? (include in write-up, if not coded for in questions on p. 17).______________________. 20-

IX. OUTINGS AND TRAVEL.

A. Do you or does someone else you know take ____________ to visit relatives (any relatives, not just those around Boston): (1) Yes (2) No ________ 2

1. When was the last time you did this?____________ ________ 2

(0) Never--N.A.
(1) More than 1 year ago
(2) Between 6 months and 1 year ago
(3) Between 3 - 6 months ago
(4) Between 1 - 3 months ago
(5) Within last month
(6) Within last 2 weeks

2. How often does ______________ go to visit relatives? ________ 2

(1) ______ at least twice a week
(2) ______ once a week
(3) ______ once a month
(4) ______ two to three times a year
(5) ______ once a year
(6) ______ once in several years

Colum

3. Do the relatives that ____________ visits live around Boston or out of town (or both--if he/she visits relatives both here and away). ________ [2
(1) ______ Boston area
(2) ______ out of town
(3) ______ both

4. Does ____________ ever travel alone or unaccompanied by other adults to visit relatives? ________ [2
(1) Yes (2) No ________ [28
If yes:
a. How far a trip is it? ____________ ________ [29
(postcode) b. How does he/she get there? ____________

5. How often does ____________ go out with you or another adult to visit places like parks, museums, or fairs? ________ [3
(Code for more frequent season)
(1) ______ everyday
(2) ______ 2-3 times a week
(3) ______ once a week
(4) ______ 2-3 times a month
(5) ______ once a month or less
(6) ______ never

6. How often does ____________ play with other children besides his brother and sister? ________ [3
(1) ______ everyday
(2) ______ 2-3 times a week
(3) ______ once a week
(4) ______ 2-3 times a month
(5) ______ once a month or less
(6) ______ never

7. Does ____________ have a best friend or friends? ________ [3
(1) Yes (2) No
Name: ____________
____
____

8. How often does ____________ play with his/her brothers and sisters? ________ [3
(1) ______ everyday
(2) ______ 2-3 times a week
(3) ______ once a week
(4) ______ 2-3 times a month
(5) ______ once a month or less
(6) ______ never

9. Does ____________ participate in any organized out-of-school activities such as youth choir, karate lessons, little league? (1) Yes (2) No ________ (3

If yes: a. What sort of activities?
(1) Little League
(2) other sports
(3) dancing
(4) music lessons
(5) drill team
(6) church related
(7) girl/boy scouts etc.

(allows for three activities)

Col. 1 = a
Col. 2 = b
|_|_| (35
|_|_| (37
|_|_| (39.

b. How often? (note frequency of each activity)
(0) N.A.
(1) once a month
(2) 2-3 times per month
(3) once a week
(4) 2-3 times per week
(5) every day

Colum

X. RESPONSIBILITIES AT HOME

A. Does ____________ take care of a younger brother or sister? ______ [41
(Question may not be appropriate for younger groups.)
(1) Yes (2) No

If yes, how often? ____________ ______ [42
(1)______everyday
(2)______2-3 times a week
(3)______once a week
(4)______2-3 times a month
(5)______once a month or less
(6)______never

B. Is ______________ expected to help with chores around the house? ______ [43
(1) Yes (2) No

If yes: How often? ______ [44
(1)________everyday
(2)________2-3 times a week
(3)________once a week
(4)________2-3 times a month
(5)________once a month or less
(6)________never

What chores? [45-4
(1)________clean room/make bed
(2)________dishes/dusting (6) laundry
(3)________take out garbage (7) clean bathroom
(4)________vacuum/mopping
(5)________errands

C. Has ______________ ever had a paper route, babysitting or snow shovelling job for money outside the home? ______ [49
(not appropriate for younger ages)
(1) Yes (2) No

What sort of job? allows for 2 jobs

Col. 1	Col. 2-regularity
(1) paper route	(1) regular
(2) babysit	(2) incidental
(3) odd jobs for neighbors, e.g. snow shovel, errands	

Col. 1 = type
Col. 2 = regularity

[50-
[52-

Chir.

XI. CHILD'S SCHOOL EXPERIENCE ; PARENT'S ATTITUDE AND INVOLVEMENT

A.1. How do you think ________ is doing in school compared to most other children his/her age?
___(1) Much better
___(2) Somewhat better
___(3) As well as
___(4) Not quite as well as
___(5) Much poorer
___(6) Can't say; don't know

2. How many problems do you think your child has learning to read compared to other children his/her age?
___(1) Fewer
___(2) About the same
___(3) More
___(4) Can't say; don't know

3. How hard do you think ______ tries to do well in his/her schoolwork?
___(1) Very hard
___(2) About average
___(3) Not hard at all
___(4) Can't tell; don't know
___

B.1. What is ________'s teacher's name? (If child has more than one regular academic area teacher, ask for reading teacher's name.)
____
(1) Knew immediately
(2) had to ask (didn't know)

2. How good a job do you think his/her teacher is doing in teaching ____________ this year?
___(1) Very Good
___(2) Pretty good
___(3) Not so good
___(4) Not good at all
___(5) Don't know

3. Do you think there's enough opportunity for you to participate in and learn about ________'s life in school?
___(1) Yes
___(2) No
___(3) Can't tell; don't know

C1. How many times this school year have you gone to ____________'s school for the following things:

Column

0 1 2 3 4 5 6+ 7(never asked)

PTA meetings ________ [60]
All school-related committees ________ {61
Special Programs (e.g. Christmas Play) ________ {62
To help out in ________'s classroom ________ {63
To help with field trips or parties ________ {64
To talk with ________'s teacher about ___________. ________ {65
If answer is at least once, ask:
Who requested the meeting? ________ [66
(1) Parent (2) Teacher (3) Both (4) Other

C2. a. Were there any meetings about the class program for the parents this year? ________ {67
______(1) Yes
______(2) No
______(3) Don't know

If yes b. Did you attend any of these meetings? ________ {68
(0) N.A. (1) Yes (2) No

c. If Yes: How many times did you attend? ________ {69
(0)______N.A.
(1)______1 or 2 times
(2)______3 or 4 times
(3)______5 or 6 times
(4)______7 or 8 times
(5)______9 or more times

(If No: to b.) Do you know how many PTA meetings have been held this year? ________ {70
(1) Yes (2) No
If Yes: how many? __________ ________ {71

D1. Is there a parents' council or parents' advisory group? ________ {72
(1)______Yes
(2)______No
(3)______Don't know
If Yes: About how many meetings of this group have you attended? ________ {73
(0)______N.A.
(1)______was not a member of council
(2)______1 or 2 times
(3)______3 or 4 times
(4)______5 or 6 times
(5)______7 or 8 times
(6)______9 or 10 times
(7)______11 or 12 times
(8)______13 or more times

2. How do you (as parent) communicate with ____________'s teacher? ______ (74
(1)______Telephone
(2)______Note
(3)______In person (go to school)

3. How does __________ feel about going to grade school? ______ (75
(1)______S/he doesn't like it; doesn't want to go.
(2)______S/he sometimes likes it and sometimes doesn't like it.
(3)______S/he does like it; does want to go.
(4)______Other (Specify)________________________________
(5)______Don't know

E1. What does ____________ like most about school?__________
____

studi) 2. What does s/he like least about school?______________
____

0
Card
Kid ID

3. How often do you help/work with __________ with his/her homework? (If response is "no homework" skip to question F3.)
______(0) Don't usually help (skip to question F3.)
______(1) Less than once a week
______(2) About once a week
______(3) About twice a week
______(4) About three times a week
______(5) About four times a week
______(6) About five times a week
______(7) Other (specify)______________________________

Ques. E2
Ques E3
(8

F1. How long did you work with ____________ yesterday? ______ (9
(1) None (2) Don't know (3) 1/2 hour or less
(4) Hour or less (5) more than 1 hour

2. Do others in the family help him/her with his/her homework? ______ (10
______(1) Yes
______(2) No
______(3) Don't know

A. Who?______________________ ______ (11
(1)______other parent (3)______younger sib
(2)______older sib (4)______other

B. How often? ______ (12
______(0)Don't usually help
______(1) Less than once a week
______(2) About once a week
______(3) About twice a week
______(4) About three times a week
______(5) About four times a week
______(6) About five times a week
______(7) Other (specify)

3. If you could have your wish, what grade in school would you like ________ to complete? ________ [13
(1) less than high school (2) high school (3) college
(4) specific job training, precollege level (5) master's
(6) advanced graduate or professional degree (7) no response

G1. Since things don't always turn out the way we want them to, how far do think ________ will actually go in school? ________ [14
Code: See above

2. In your opinion, what could prevent ________ from completing? ________ ________ [15
____
(1)____ nothing
(2)____ catastrophe
(3)____ financial
(4)____ child's academic record
(5)____ child's effort

3. If you could have your wish, what would you like ______ to be when s/he grows up? ______ [16
____1. Job given (specify) ________ If 1 or 2, classify: └┴┘ [17-
(post code) ____2. Other (specify) ________
____3. Don't know (encourage) ________
4. Child's choice

H1. Does your child bring papers home from school? ______ [19
(1) Yes (2) No
If Yes: For what? ________

2. What kinds of grades does your child get on his/her report card? Code: (1) A's (2) B's (3) C's
(4) D's (5) Failing
(6) E's (7) S (8) I
(9) Very good (10) good
(11) not so good

____1. In reading └┴┘ [20-2
____2. In writing └┴┘ [22-23
____3. In math └┴┘ [24-25
____4. In conduct └┴┘ [26-27

3. What do you do when your child brings home a good/ bad report card? └┴┴┘ [28-
________ └┴┴┘ [31-

I1. Does your child ever need to stay after school? If so, for what? (1) Yes (2) No (3) Teacher reproach ______ [34
____

2. Do you ever need to go to school to speak to the teacher/principal about your child? (1) Yes (2) No ______ [3

3. Is your child reading (Col. 1)/doing math (Col. 2) on grade level? (1) Yes (2) No └┴┘ [36

J1. Did your child go to kindergarten/nursery school? ______ [3
(1) Yes (2) No

2. What is the most important thing school should teach your child? ________ ______ [3
(1)____ basic skills (2)____ reading (3)____ discipline
(4)____ skills & discipline (5) social contacts (Getting along with others

3. Does your child talk about school? (1) Yes (2) No ______ [4

K.1. Are there special school activities your child participates in? ______ [4

Column

.2. When ________ grows up, what do you think he/she will actually do?

(post code) ____

____

3. What is your idea of a good student? ________________________________

(post code) ____

L. 1. What is your idea of a good teacher? ________________________________

(post code) ____

2. How does the building and equipment of the schools that your children attend compare to most other schools in the city area? (check one)

(1) ___ Better than most other schools
(2) ___ As good as most other schools
(3) ___ Worst than most other schools
(4) ___ Don't know

3. How do most teachers in schools that your children attend compare to teachers in most other public, parochial, and private school in the city area?

(1) Worse than average
(2) Average
(3) Better than average

M. 1. Are teachers in the schools that your children attend paying enough attention to all their students, or are some students neglected?

(1)___ Neglect some students--why? ________________________
(2)___ Pay attention to all children
(3)___ Don't know

3. Would schools be better or worse if parents had more control over them(the schools)?

(1)__ Better

(2)__ Worse

(3)__ About the same

(4)__ Don't know

N. 1. Have teachers in the schools in your community any idea about the problems faced by the people in this area?

(1) ___ Understand

(2) ___ No idea

(3) ___ Don't know

2. Is there anything you can do to improve the schools in this neighborhood?

(1) Yes
(2) No
(3) Don't know

(postcode) If answer is "no", why is there nothing you can do?____________ 5

____

3. Are most classrooms in your district over-crowded?

(1) Yes
(2) No
(3) Don't know

O. 1. Are most teachers genuinely interested in talking with parents about school?

(1) Yes
(2) No
(3) Don't know

2. Is it okay for parents to keep their children out of school to help out at home once in a while?

(1) Yes
(2) No
(3) Don't know

Col. n.

3. Are teachers making children doubt and question things that they are told at home?

(1) Yes
(2) No
(3) Don't know

P-1. Are the teachers in the schools your children attend good examples for your children?

(1) Yes
(2) No
(3) Don't know

2. Are parents usually the cause of their children not working hard in school?

(1)___ Yes
(2)___ No
(3)___ Don't know
(4)___ Sometimes
(5)___ Partially

3. Is it true that anyone who can do the work can go to college if he/she wants to?

(1) Yes
(2) No
(3) Don't know

(postcode) If response is "no", why?________________________________

____

Q. 1. Can you do anything about it if you disagree with the school principal?

(1) Yes
(2) No
(3) Don't know

(postcode) If response is "no", why do you feel you cannot do anything?

____

Column

2. Is it true that most children have to be made to learn? └┘ 7

(1)___ Yes

(2)___ No

(3)___ In some things

(4)___ Don't know

3. How well do you think _________ gets along with the teacher, compared to other children in his/her class? └┘ 7

(1)___Better than most children

(2)___About average

(3)___Not as well as most children

(4)___Don't know

R. 1. Is _________ shy with his/her teacher? └┘ 7

(1) Yes

(2) No

2. Are there things you have noticed which your child can do well?

(postcode) ______________________________ └┘└┘└┘└┘ 73-

____

3. Are there things he can't do well? ______________________________

(postcode) ______________________________ └┘└┘└┘└┘ 77

Subject ____________________

M + F Interview
Part 2

Administered by ____________________

Date ____________________

Coded by ____________________

Date ____________________

XII. MOTHER'S INTERVIEW -- T.V. QUESTIONS

1. How many T.V. sets do you have in your house (that are working)?
(0) (1) (2) MORE (3) ___ [illegible]

2. Is it color or black and white?
(1) Color (2) Black and white ___ [illegible]
(1) Color (2) Black and white: 2nd set ___ [illegible]

3. In what room is the T.V.?
(1) Living room (2) Kitchen (3) Den (4) Prnt Bdrm ___ 24
(5) Chld rm (6) Other: __________ ___ 25
2nd T.V.: ____________________

4. Who watches T.V. most often in your family? ___ 26
(1) Me (2) Spouse (3) Target Child (4) Other child
(5) Everyone about same (6) All children
(7) Both parents.

5. Who watches T.V. the least often? ___ 27
(1) Me (2) Spouse (3) Target Child (4) Other child
(5) Everyone about the same

6. Do you have a special seat that you sit in when you watch T.V.? self Y-N ___ 28-2
(1) Yes (2) No
If yes, where?: ____________________ where ___ 30-3
(If respondent has a partner) what about your partner? spouse Y-N ___ 32-3
(1) Yes (where) ______________ (2) No where ___ 34-3
What about your child(ren)?
(1) Yes (where) ______________ (2) No child Y-N ___ 36-3

For second T.V.: where ___ 38-3

Do you have a special seat that you sit in when you watch T.V.?
(1) Yes (2) No
If yes, where?: ____________________
(If respondent has a partner) what about your partner?
(1) Yes (where) ______________ (2) No
What about your child(ren)?
(1) Yes (where) ______________ (2) No

6a. How many hours does __________ watch T.V.? a. ___ 40
(1) 6-8 hours each day
(2) 4-6 hours each day
(3) 3-4 hours each day
(4) 2-3 hours each day
(5) 1-2 hours each day b. ___ 41
(6) 0-1 hours each day
(7) 2-3 times each week
(8) one time each week
(9) 2-3 times each month c. ___ 42
(10) once a month or less
(11) never

probe to get
hrs- a.m.,
afterschool,
evening. etc
a. weekdays
b. Saturdays
c. Sundays

7. - How often do you watch TV? - (Get out response first) [illegible]

(Probe to find out when during the day respondent watches
T.V.--get number of hours for each question) [illegible]

A. Do you watch in the morning, or do you turn it on when you get up? (#hrs) ______ -5

B. (If not working) Do you watch it during the day? (#hrs) ______ -6

C. (If working) Do you watch it when you get home from work? (#hrs) ______ -7

D. Do you watch it during dinner? (#hrs) ______ -1

E. In the evening? (#hrs) ______ -1

F. How about weekends?
Do you usually watch on Friday night?
(1)Yes ______ (2)No If yes, # hrs ______ -9-50
Y-N #

Saturday during the day?
(1)Yes (#hrs) ______ (2)No 51-52

Do you usually watch on Saturday night?
(1)Yes (#hrs) ______ (2)No 53-4

Sunday during the day?
(1)Yes (#hrs) ______ (2)No 55-6

Do you usually watch on Sunday night?
(1)Yes (#hrs) ______ (2)No 57-8

8. Are there certain programs you watch every day? 59
(Such as the news or soap operas)
(1)Yes (2)No If Yes: What are they? ______ 60-61
______ 62-63

9. When you're watching the T.V. do you like to
1) just watch 2) do something else while watching? 64
3) both 65

Both: How often?
(1)Usually (2)Sometimes (3)Never

What do you like to do? (allow for more than one response)
(Possible responses)
(1)Reading
(2)Handiwork--knit, crochet, woodwork, etc.
(3)homework
(4)Chores
(5)Snacking
(6)Mealtime
(7)Cooking
(8)Play games 66-67
(9)repair
(10)Other ______ 68-69
70-71

How about your child(ren)?
Target ____________________ Child#2 ____________________ 72-73

Child #3 ____________________ Child#4 ____________________ 74-75

If other activities: 76-77
(1) Usually (2) Sometimes (3) Never

What? ____

* 10. Can ______ watch T.V. anytime s/he wants to? Or do you have a time allotment? (Elaborate and probe for differences between sibs) 78
(1) anytime (2) time allotment
If time allotment, what is it? 79

80

particularly
terested
these.
obe;
laborate

Card # ____

How do you get them to stick to the rules? 1-3

Card ID Kid ID

11. Are you watching T.V. with ________ anytime? 4

(1) Usually (2) sometimes (3) Never

(Get specific answer as well)

* 12. Is ________ allowed to watch whatever s/he likes to or do you have restrictions? 5
(1) allowed to watch anything (2) restrictions
If restrictions, what are they?

* How do you get them to stick to the rules?

* 13. How did you decide on these rules for your children? For instance, who made them? ☐☐ 6-7

☐☐ 8-9

any other rules?

* 14. What happens when you and your partner disagree on these rules? ☐☐ 10-11

* 15. Whose job is it to see that these rules are followed? ☐☐ 12-13

☐☐ 14-15

16. What are your child's favorite programs? (are there differences between siblings?) ☐☐ 16-17

☐☐ 18-19

17. How often do you use extra T.V. as a reward for your children's good behavior? Probe for reasoning and for possible differences for siblings)
(1) usually (2) sometimes (3) never ☐ 20

Do you ever use T.V. for a "reward" for yourself?

18. How often do you use "no T.V." as a punishment for your child's bad behavior? (Again, probe for particulars and reasoning)
(1) usually (2) sometimes (3) never ☐ 21

19. Does your family get some sort of a T.V. program guide? ☐ 22
(1) every week (2) every few weeks (3) every couple months (4) never

Do you get it in the newspaper or at the market or do you buy it separately or get it mailed to you?
(1) newpaper (2) free at market (3) buy it separately (4) subscription ☐ 23

20. (if they do get one) How do you use it? (possible answers:)
(1) plan the week's programs in advance
(2) check each day in advance
(3) look at it right before turning on the set
(4) look at while set is on ☐ 24
(5) don't really use it
(6) other, specify:

* 21. If more than one person in your family is in the room with the T.V., who usually turns on the T.V. set? ☐ 25

(1) me (2) spouse (3) target child (4) other ________

☐ 26

Second set?:

* 22. If more than one person is in the room, who decides which channel to watch?

☐ 27

second set: ☐ 28

* 23. If more than one person is in the room, who changes the channel once the TV set is on? ☐ 29

second set: ☐ 30

* If more than one person is in the room, who turns off the set? ☐ 31

☐ 32

second set:

* 24. What happens when different people in your family want to watch different programs at the same time? For instance, what happens if you and your partner want to watch different programs at the same time? What usually happens? ☐ 33

☐ 34

How do you feel about that?

* What about when you (or your partner) and your child(ren) want to watch different programs at the same time? And how do you feel? ☐ 35

☐ 36

* What about when two or more of your children want to watch different programs at the same times? ☐ 37

☐ 38

25. What kind of T.V. program do you enjoy watching the most? ☐☐ 39-40

(1) situation comedy
(2) medical drama
(3) soap opera
(4) cartoons
(5) game shows
(6) police drama
(7) movies
(8) sports
(9) news/info
(10) educational
(11) religious
(12) Masterpiece Th, etc.
(13) drama/action
(14) music variety
(15) family drama

Why?

The kind of program you enjoy watching the least? And why? ☐☐ 41-42

26. Why do you watch T.V.? (Pick top three and rank order) ☐☐ 43-44

(1) ____ Instruction (As cooking, auto repair, language)
(2) ____ Entertainment
(3) ____ Information (As news, weather, documentary) ☐☐ 45-46
(4) ____ Learn about human relationships
(5) ____ To get away from problems (As work, relationship)
(6) ____ To get away from people (Family, friends, colleagues)
(7) ____ To be with people (As family, friends)
(8) ____ Conversation topics ☐☐ 47-48
(9) ____ To avoid loneliness
(10) ____ To pass time
(11) ____ Commercials
(12) ____ Relaxation
(13) ____ To avoid work (Housework, homework)
(14) ____ To avoid conflict with family members
(15) ____ As a way to fall asleep
(16) ____ Other: ________________________________

27. What would you do if your T.V. broke? ____________________
____ ☐☐ 49-50
____
____

Sibling Questions

1. As you see the children in your family how would you say they were different, just in general? (First let parent respond -- then probe in terms of:

   reading and more general school achievement
   relationships with peers
   with adults
   athletic ability
   temperament
   interests
   skills and abilities

[51]
[52]
[53]
[illegible]
[55]

2. Who, if anyone, on either side of the family, does each of your children 'take after'? In what ways?

Child #1
#2
#3
#4
#5

3. For whom, if anyone, were your children named?

#1
#2
#3
#4
#5

4. What was your position (youngest of 3 children, etc) in your family as a child?

73-74

5. Is ________________ particularly close with any of his/her brothers or sisters? Are other children in the family particularly close with each other? If so, has this always been the case?

75

77

6. Does ______________ have special problems with any of his/her brothers or sisters? What about the other children in the family? If so, has this always been the case?

78-79

80

Card # ______

1-3

[illegible] ID KID ID

7a. To what extent do any of your children try to be like each other? For example, do any of them seem to copy each other? In what ways?

4-5

6-7

8-9

10-11

12-13

7b. To what extent do your children try to be different from each other? In what ways?

14-15

16-17

18-19

20-21

22-23

8. We have spoken before about what you would like__________ to be when he/she is grown up. What about the other children in the family? Have you thought about what you'd like them to be? Have they thought about what they would like to be when they are grown? (Probe for indications that parent has same/different goals and expectations for individual children in the family.)

ch #1 __________

#2 __________

#3 __________

#4 __________

#5 __________

9. Now I would like you to compare________________'s experiences in school with those of the other children in your family:

a. Who enjoys school the most among your children? the least? What about________________?

☐ 44

☐ 45

b. Who works the hardest in school? the least? And____________?

☐

c. Who has the most natural ability for school work in the family? What about________________?

☐ 5

☐ 5

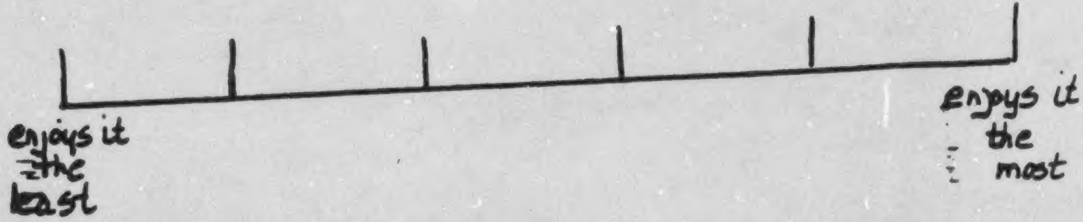
d. Which child is the most involved in sports at school? the least? And ________________?

☐ 5

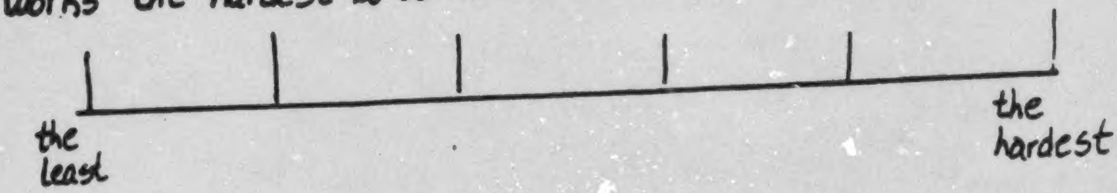
☐ 5

☐

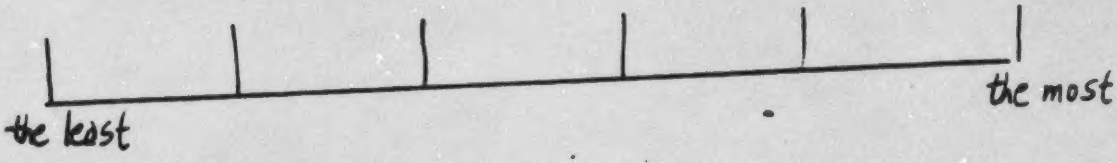
a. Enjoys school:


enjoys it the least
enjoys it the most

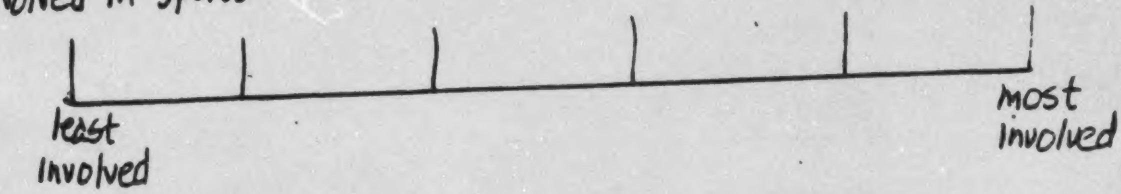
b. Works the hardest at school


the least
the hardest

c. natural ability for schoolwork:


the least
the most

d. involved in sports


least involved
most involved

56

e. Which child is the most involved with other extra curricular activites at school? the least?

57

58

f. Which of your children is the best reader? the poorest reader? Who enjoys reading the most? the least? And ________________________?

59

60

61

g. Which one of the children is the most successful academically (in terms of grades)? the least? And ______?

62

63

64

h. Which of the children is most involved with friends at school? the least? What about ________________?

65

66

67

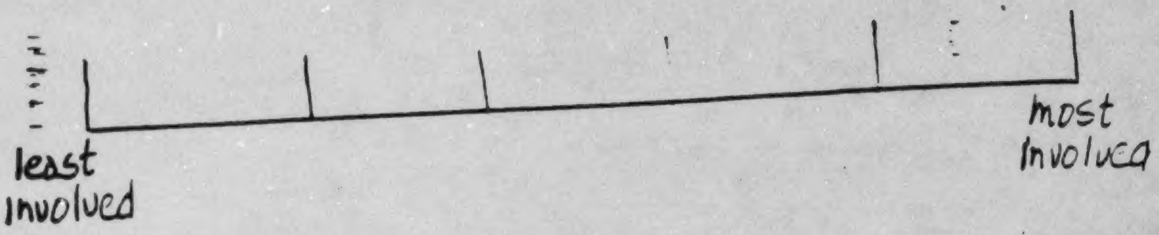
68

10. How often does ____________________ do the following things with his brothers and sisters?

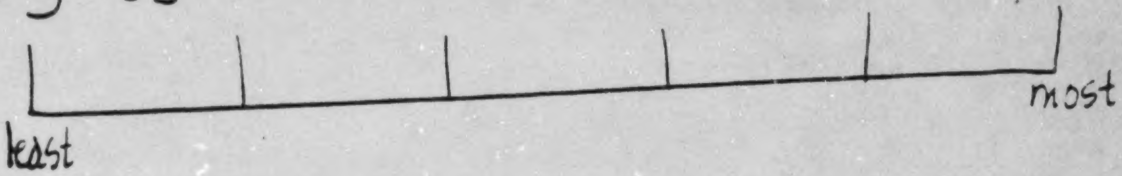
(1) everyday
(2) 2-3 times/week
(3) once a week
(4) 2-3 times/month
(5) once a month
(6) once in two months
(7) 2-3 times/year
(8) once/year
(9) never

		Name of sibling #1 ____________	#2 ____________	#3 ____________	#4 ____________
a	play games together				
b	participate in sports together				
c	do homework together (or help each other do homework)				
d	do things together with some of same friends				
e	do chores together				
f	talk about problems/confide in each other				
g	tease, bug, annoy each other				
h	argue and fight with each other				
i	watch TV together				
j	support, encourage each other				

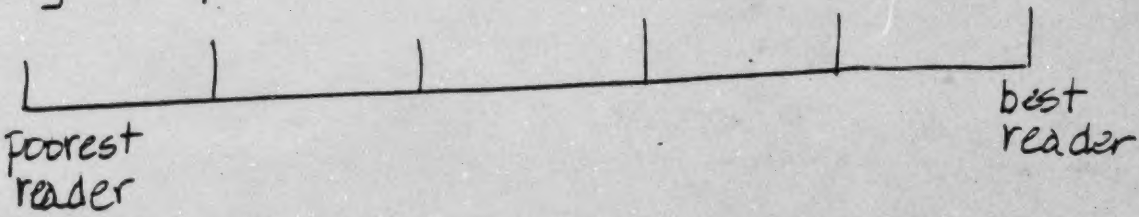
e. extracurricular activities at school:


least involved
most involved

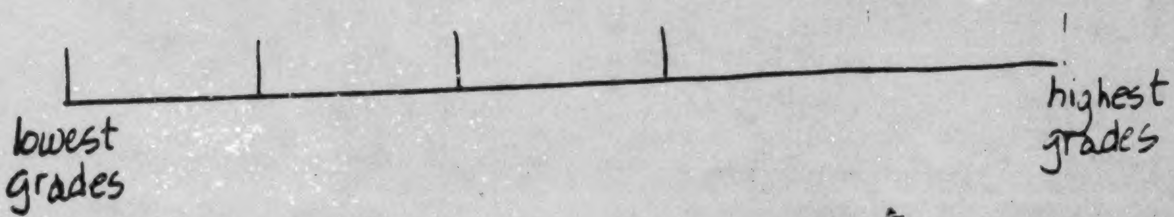
f. reading enjoyment:



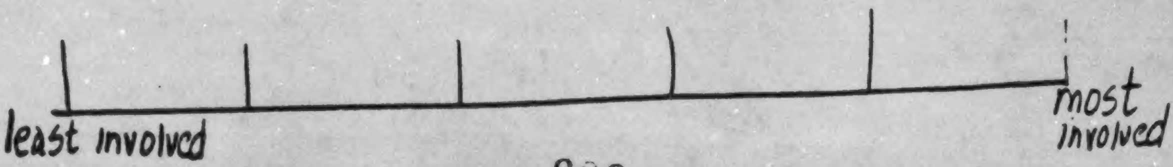
reading ability:


poorest reader
best reader

g. Grades:


lowest grades
highest grades

h. involvement with friends:


least involved
most involved

10-1

Directions: List the members of your family and their ages below. Then choose a nickname (or abbreviation) to represent each person and make a note of those here: (Include yourself!)

Name of Family Member	Age	Nickname

For each of the behaviors listed below rate each member of your family by placing their nicknames in the column that best describes them. Be sure each person is rated on each behavior. There can be more than one family member in each box.

	never	rarely	sometimes	often	always
1. active					
2. outgoing,					
3. gives helpful suggestions					
4. says what to do, organizes activities					
5. tends to be bossy and disapproving					
6. gets angry					

10-B

	never	rarely	sometimes	often	always
7. wants to show off					
8. jokes around					
9. tries to help you have a good time					
10. friendly					
11. helps you when you work					
12. spends a lot of time on tasks or projects					
13. finicky, not satisfied					
14. unfriendly					
15. unreliable, doesn't keep promises					
16. dramatizes, playacts or makes believe					
17. fun to be with					
18. is appreciative,					

10-e

	never	rarely	sometimes	often	always
19. respectful					
20. works too hard at tasks					
21. acts overburdened, as if there is too much to do					
22. wants to be alone					
23. acts hopeless as if nothing will work out					
24. acts shy					
25. quietly happy, pleased					
26. quiet					

EMPLOYMENT OUTSIDE THE HOME (OR PAID WORK INSIDE THE HOME)

Card # ____

Card ID Sub ID [1-3]

In this section of the interview, I'm going to ask about your experiences working. Although we certainly consider homemaking to be work, here we will use the word "work" to mean paid work which includes work done both outside or inside your own home.

1. Are you working now?
(1)Yes (2)No ___ [4]
If no: Ask questions 2-7 with reference to last job.
If yes: What do you do? (Get as concrete a description of the job as possible, including level and responsibility)
(1)Current (2)Previous ___ ___ [5-6]
____
____ ___ ___ [7-8]

2. How many hours a week do (did) you work at this job?
(1)10 hrs per week or less
(2)11-20 hrs per week
(3)21-30 hrs per week ___ [9]
(4)31-40 hrs per week
(5)over 40 hrs per week

3. What hours of the day is this?
(1)Morning
(2)Afternoon
(3)A 9-5 or 8-4 day
(4)Evenings or the 4-11 shift ___ [10]
(5)Night shift
(6)Irregular or variable
(7)Other
(8)Can't say

4. Is the work interesting?
(1)Yes (2)No (3)Somewhat ___ [11]

5. Is the work physically tiring or mentally exhausting?
(1)Yes (2)No (3)Somewhat ___ [12]

6. All things considered, how satisfied are you with your present job?
(1)Very satisfied
(2)Somewhat satisfied ___ [13]
(3)Somewhat dissatisfied
(4)Very dissatisfied

Why?____________________________________
____
____
____ ___ [14]

7. Would you mind telling me how much you make? (Hourly wages or information to calculate hourly wage--including tips) ______________________ ___ [15]

(If the respondent is not currently working, ask:)

8. Are you? ___ [16]
(1) Looking for work?
(2) Not looking for work?

There are many possible reasons why you may not be working now. Below, several of the many possible reasons are listed. The reasons most important to you may not even be listed here, but please tell me how much each reason applies to you from the following choices.
(1) Applies a lot
(2) Applies somewhat
(3) Applies a little
(4) Doesn't apply at all

9. I am not working because...

(1) ____ I don't know what kind of job I want ____ [17]
(2) ____ I'm on welfare ____ [18]
(3) ____ There aren't enough jobs right for mothers of young children ____ [19]
(4) ____ The job market is too competitive ____ [20]
(5) ____ It's hard to find a job if you haven't been working ____ [21]
(6) ____ I'm not in good physical condition ____ [22]
(7) ____ I don't know what I'd be good at ____ [23]
(8) ____ It's asking too much of me right now ____ [24]
(9) ____ I just don't want to ____ [25]
(10) ____ I want to be home with my children ____ [26]
(11) ____ I can't make child care arrangements ____ [27]
(12) ____ I have a child under the age of two ____ [28]
(13) ____ I can't find a job ____ [29]

10. Any other, more important reasons? ______________________
____
____
____
____
______________________ ___ [30]

11. EMPLOYMENT HISTORY CHART

(Can you tell me all the jobs you've had since leaving school?)

DATES | JOB DESCRIPTION | LOCATION

#months

(start with most recent first) -

#mo. | job descrip | (31-34)

(35-38)

(39-42)

(43-46)

(47-50)

12. Have you ever received or are you now receiving any kind of job training such as workfare, WIN, or on-the-job-training? —[51]
(1)Yes (2)No
If Yes: What kind or kinds?
(1)Job training from a private non-profit firm
(2)CETA jobs
(3)Job-training that was part of college or graduate school
(4)WIN
(5)On-the-job
(6)Private training that respondent paid for
(7)Other —[52]

If Other:Which?______________________________

How many others?______________________________ —[53]

13. When you were growing up, did you think you would probably become a . . .
(1)Teacher Aid
(2)Homemaker
(3)Nurse
(4)Worker
(5)Teacher
(6)Homemaker and worker
(7)Waitress
(8)Didn't think about it —[54]
(9)Other______________________________

14. Did you have any dreams or fantasies about some other job?
____
____
____
______________________________ ——[55]

1a. Now I would like to ask some questions about your education. [57]
1. What was the grade in school that you completed?
(Count number of years past high school if appropriate and add to 12)

2. Do you plan to continue your education? — [58]
(1)Yes (2)No
If Yes: To what level? — [59]
(1) High school
(2) College
(3) Graduate school

1b. How did you feel about school? Did you like it or hate it? — [60]
(1)Liked a lot (2)Liked a little (3)Disliked (4)Hated

2a. As you think about your school experience, what kind of a student did most of your teachers think you were in elementary school? — [61]
(1)Good (2)Average (3)Less than average

2b. What kind of a student did you think you were? — [62]
(1)Good (2)Average (3)Less than average

3a. What about high school? What kind of a student did you think you were? — [63]
(1)Good (2)Average (3)Less than average

3b. Your teachers? — [64]
(1)Good (2)Average (3)Less than average

4a. What subjects did you like or dislike in elementary school?

like [65-66]
[67-68]

4b. What subjects did you like or dislike in high school?

dislike [69-70]
[71-72]

H.S. like [73-74]
[75-76]

5. Looking back on your elementary school years, would you say that your elementary school was academically average, below average, or above average?
(1)Average (2)Below average (3)Above average

H.S. dislike [77-78]
[79-80]

6. What about your high school? Would you say it was academically average, below average, or above average?
(1)Average (2)Below average (3)Above average

Card # ___

[1-3]
card ID
Kid ID

— [4]

— [5]

Mother's Reading

Now I'd like to ask you some questions about your reading.

1. Do you like to read or not like it? ___ [6]
(1) Yes (2) No

2. Do you ever read books? ___ [7]
(1) Yes (2) No (3) Used to, but not now.

3. Which of the following things did you read during the last week?
(1) Yes (2) No
(A) ___ Book
(B) ___ Mail
(C) ___ News
(D) ___ Messages
(E) ___ Magazine
(F) ___ T.V. Guide
(G) ___ Newspaper ads, weekly shopper
(H) ___ Cookbook/recipes
(I) ___ Notices from school
(J) ___ Hymn book/prayer book
(K) ___ Other

A ___
B ___
C ___
D ___
E ___
F ___
G ___
H ___
I ___
J ___
K ___

4a. Do you clip coupons?
(1) Once a week (2) Twice a week (3) Occasionally (4) Never

4a. ___

4b. From where?
(1) Magazines (2) Newspaper (3) Throwaways (4) Supermarket flyers

4b. ___

5. What kinds of books do you like to read?
(1) Romance
(2) Mystery
(3) Science Stories
(4) Factual Topics
(5) Short Stories
(6) Biographies
(7) Autobiographies
(8) Other

#5. 2 Choices ___ ___

6. Do you have any favorite authors? (code for # named rather than Yes No) ___
(1) Yes (2) No
If Yes: Who are they? ___________

7. (If non English-speaking) In what languages do you read books mostly?
(1) Spanish
(2) Greek
(3) Portugese
(4) French
(5) Creole
(6) Above plus English (note which)

___

8. What magazines do you read regularly? ___________ ___

9. Are there others that you read occasionally? (Probe for People, Family Circle, T.V. Guide, Soap Opera Digest) ___________ ___

10. What newspapers do you read regularly? ___________ ___ ___

11. Are there others that you read occasionally? ___________ ___ ___

IT

12. Can you remember the names or authors of any of your favorite books as a child? Code or # names
(1)Yes (2)No
# authors —

Can you remember what you liked to read about?
(1)Yes (2)No
What? (Code as in #5 above)
2 choices
What kind of a reader are you?

13. Are you fast or slow?
(1)Fast (2)Slow
#13. — 35

Careful?
(1)Yes (2)No
— 36

14. Do you write to out-of-town relatives or friends?
(1)Yes (2)No
— 37

If Yes: How Often?
(1)Weekly
(2)Monthly
(3)Several times a year
(4)Yearly
(5)Not yearly
(6)Never
— 38

15. Who reads the most in your family?______________________ — 39

Who reads the least?______________________ — 40

16. Of the kids, who reads the most?______________________ — 41

RELATIONSHIPS--STRESS AND SUPPORT

Now I'm going to ask you some questions about your relationships with other people.

A. How often would you say that the following statments apply to your experiences with your relatives and friends?

Code: (1)Most of the time
(2)Some of tne time
(3)Once in a while
(4)Seldom or never

1. How many adult relatives who do not live with you do you see or talk to every day? ____ [42]

2. How many addtional relatives do you see or talk with at least once a week? ____ [43]

3. My relatives are people who can be counted on when I am in trouble. ____ [44]

4. Some of my relations are dependent upon me financially. ____ [45]

5. Some of my relations are dependent upon me emotionally. ____ [46]

6. Relations are strained between me and some of my relations. ____ [47]

7. How often do you feel resentful when your relatives ask you for favors or help? ____ [48]

8. Do you have friends or relatives who have problems which cause you stress? (Problems such as with work, health, marriage, alcohol or drugs, or the law)
(1)Yes (2)No ____ [49]

9. How much stress would you say their problems cause you?
(1)A lot of stress
(2)A moderate amount
(3)A little stress
(4)No stress whatsoever ____ [50]

B. Who do you turn to when the following sorts of things happen to you?

Code: (1)Husband or boyfriend
(2)Friend
(3)Relative
(4)Counselor
(5)Child
(6)No one

a.You have some good news? ____ [51]
b.You have some bad news? ____ [52]
c.You feel depressed? ____ [53]
d.You want to go out and have some fun? ____ [54]

Life event variables

1. Since ______________________ was three years old, have there been any deaths among your immediate family members or among close friends? ___ 55

    (1) Yes

    (2) No person ___ 56

    If yes, who was the person ____________________ When? ____________________ when ___ 57

2. Since ____________________ was three years old, have you moved? ___ 58

    (1) Yes ___ 59

    (2) No

    If yes, how often? ______________________________

3. Since ____________________ was three years old, has there been a major change in the health or behavior of a family member? ___ 60

    (1) Yes who ___ 61

    (2) No

    If yes, who was the person? ____________________ When? ____________________ when ___ 62

4. Since ____________________ was three years old, has there been a major change in the financial state of your family? ___ 63

    (1) Yes When? ________________________ ___ 64

    (2) No

5. Since ____________________ was three years old, has there been a major change in the work of you or your spouse? ___ 65

    (1) Yes When? ________________________ ___ 66

    (2) No

6. Since ____________________ was three years old, has there been a change in the make up of your family, for example new members moving in, births, separation of parents, children leaving, etc? ___ 67

    (1) Yes When? ________________________ ___ 68

    (2) No

___ 69

___ 70

___ 71

___ 72

Do you belong to any of the following types of groups?

	Belong? (1)Yes (2)No	A. Names of Groups	B. Frequency of Attendance	C. Office Holder? (1)Yes (2)No	D. Name of Job	
1. Clubs or social groups (Women's clubs, card clubs, bowling clubs)			___per week (1) ___per month (2) ___per year (3)			1, yes/No — [73] 2. freq — [74] 3. office holder — [75]
2. Neighborhood action-associated groups (Community action, block groups, parents' councils)			___per week ___per month ___per year			1. — 76 2. — 77 3. — 78
3. Groups which are mainly connected with children's education (PTA, Head Start)			___per week ___per month ___per year	Card # ____		1 — 79 2. — 80 — — — [1-3] 3 — 4
4. Political action groups (Political party, CORE, NAACP, SCLC, Citizens' committees)			___per week ___per month ___per year			1. — 5 2 — 6 3 — 7
5. Other groups (Job-affiliated, unions, study groups, etc.)			___per week ___per month ___per year			1 — 8 2 — 9 3 — 10
6. Religious groups or church organization (Choir, Ladies' auxiliary)			___per week ___per month ___per year			1 — 11 2 — 12 3 — 13

If respondent belongs to more than one group: Which of the above groups that you belong to is most important to you?________________ — 14

Do you go to church or another religious institution?
(1)Yes (2)No — 15
If Yes: How often do you go?
(1)More than once a week
(2)Once a week
(3)Once every two weeks
(4)Once a month — 16
(5)Less than once a month

20

FAMILY INCOME AND FINANCIAL STABILITY

The next set of questions ask about your household income.

A. Please tell me your household's approximate income from all sources during the past year. (If respondent has trouble coming up with a figure, ask her to choose income range from this page)

(1) Less than $1000
(2) $1000-$2999
(3) 3000- 3999
(4) 4000- 4999
(5) 5000- 5999
(6) 6000- 6999
(7) 7000- 7999
(8) 8000- 8999
(9) 9000- 9999
(10) 10000-10999
(11) 11000-11999
(12) 12000-12999
(13) 13000-13999
(14) 14000-14999
(15) 15000-15999
(16) $16000-$16999
(17) 17000- 17999
(18) 18000- 18999
(19) 19000- 19999
(20) 20000- 20999
(21) 21000- 21999
(22) 22000- 22999
(23) 23000- 23999
(24) 24000- 24999
(25) 25000- 25999
(26) 26000- 26999
(27) 27000- 27999
(28) 28000- 28999
(29) 29000- 29999
(30) 30000+

__ __ [17-18]

Note: The following is not a question. Interviewer should work this out independently.

1. Total household income ____

2. Per capita income= $\frac{\text{total income}}{\text{\# hshld rsdnts}}$.

3. Income stresser score. Per capita Annual Income= ____

(1) $2500+
(2) 2000-2500
(3) 1500-2000
(4) 1000-1500
(5) 500-1000
(6) less than $500

__ [19]

B. Now, I would like to know where your household money comes from.

1. Where did the largest part of your household income come from? ______________________

(Probe using the following list of sources.

Percent of yearly income

0= no $ fr this source
1= less than 25%
2= 25-50%
3= 50-75%
4- 75-100%

(1) Your own income ____ ________ [20]
(2) Your husband's income ____ ________ [21]
(3) Social security ____ ________ [22]
(4) Welfare ____ ________ [23]
(5) Retirement ____ ________ [24]
(6) Alimony ____ ________ [25]
(7) Child Support payments ____ ________ [26]
(8) Inheritance ____ ________ [27]
(9) Other ____ ________ [28]

2. If you had a sudden unexpected need for $100, could you get it?

(1) Yes, easily
(2) Yes, with difficulty or sacrifice
(3) Don't know
(4) No

____ [29]

Now I have some questions about __________'s reading.

1. What does ________ like to read?

(1) Story books
(2) Factual books
(3) Short stories
(4) Newspapers: Which selections?
(5) Plays
(6) Poems
(7) Magazines
(8) Comics
(9) Directions/manuals
(10) (Auto)biographies
(11) Textbooks
(12) Other (specify) ____________________

2. How many books does _______ read in a month? _____ 34-5

3. What subjects does _______ like to read about?

(1) People
(2) Science
(3) Sports
(4) Animals
(5) Science fiction
(6) Mystery
(7) Humor
(8) Cars
(9) Romance
(10) Other (specify) ____________________

36-

4. Does ________ bring home books from school?
(1) Yes (2) No

What kinds? (Code as in #1, above)

Are these books from the library? The classroom? and/or the teacher?
(1) Library
(2) Classroom
(3) Teacher

47

5. About how much time a week does _______ read for pleasure and for required assignment? Code # hrs
Pleasure (hours) _______ 48-9
Assignment _______ 50-1

6. Are there any special times of the day that ________ reads? (e.g., before supper, in bed) ____________________ 52

7. Does ________ have any favorite books or stories? 53
(1) Yes (2) No code by # mentioned
If Yes: What are they? ____________________

8. Did _______ have any favorite books as a young child? — 54
(1)Yes (2)No (3)Don't know code for #
If Yes: What?____
____

9. Did _______ pretend to read books before he could really read? — 55
(1)Yes (2)No

Did _______ memorize books before he could really read? — 56
(1)Yes (2)No

10. Does your child read aloud to you or anyone else? — 57
(1)Yes (2)No
If Yes: How often?
(1)Once a day (4)2-3 times per month
(2)2-3 times per week (5)Monthly
(3)Once a week (6)Less than monthly — 58
What kinds of things?____
____ — 59

11. Did you read to him when he was younger? — 60
(1)Yes (2)No
If Yes: When did you stop?
(1)3 years (5)7 years
(2)4 years (6)8 years — 61
(3)5 years (7)9 years
(4)6 years

12. How often?
(1)Once a day (4)2-3 times per month
(2)2-3 times per week (5)Monthly — 62
(3)Once a week (6)Less than monthly

12a. Did anyone else read to him/her? — 63
(1)Yes (2)No

What kinds of books? (Code as in #1, above) |_|_| 64-5

Did _______ enjoy being read to? 1) yes 2) NO |_|_| 66-7
— 68

13. Do you ever tell stories? — 69
(1)Yes (2)No
About what?____ 2 code { — 70
How often? — 71
(1)Once a day (4)2-3 times per month
(2)2-3 times per week (5)Monthly
(3)Once a week (6)Less than monthly — 72

If No: Did you ever tell _______ stories? — 73
(1)Yes (2)No
If Yes: When did you stop?
(1)One year (2)Two yrs (3)Three (4)Four yrs (5)Five yrs — 74

14. Do you and ___________ play any games together that have to do with words, such as crossword puzzles, scrabble, boggle, etc.? —75
(1)Yes (2)No
If Yes: How often?
(1)Once a day (4)2-3 times per month
(2)2-3 time per week (5)Monthly —76
(3)Once a week (6)Less than monthly

—77

What games are they? ___________________________ —78

Does _______ play games with siblings, friends, father? —79
(1)Siblings
(2)Friends
(3)Father

15. Do you and _______ discuss items from the newspaper? #15 —80
(1)Yes (2)No Card # —
a If Yes: What kinds of things? ___________________________ 1-3
Card ID
How often?
(1)Once a day (4)2-3 times per month
(2)2-3 times per week (5)Monthly #15a — 4
(3)Once a week (6)Less than monthly

— 5

16. Do you ever recommend books to _______ read? — 6
(1)Yes (2)No
If Yes: How often? #16 — 7
(1)Weekly
(2)Monthly — 8
(3)Yearly
(4)Never

What was the last one? (Note all mentioned) ___________________________ — 9

17. When your child is reading: — 10
A. Do you ask to see the book?
(1)Yes (2)No
B. Without your asking does he show it to you? — 11
(1)Yes (2)No
C. Does he talk about it? — 12
(1)Yes (2)No

18. Does _______ ever listen to radio or stereo and read at the same time? — 13
(1)Yes (2)No

19. Does _______ ever watch T.V. and do homework at the same time? — 14
(1)Yes (2)No

20. Does _______ ever watch T.V. and read at the same time? — 15
(1)Yes (2)No

21. Does _______ ever listen to the radio or stereo and do homework at the same time? — 16
(1)Yes (2)No

—17

22. Does ________ have a library card?
(1)Yes (2)No

23. Do you and ________ go to the library or bookmobile together?
(1)More than once a week (4)Once a month
(2)Once a week (5)Less than once a month —18
(3)A couple of times a month (6)Never

24. Does ________ go to the library or bookmobile without you?
(1)Alone
(2)With siblings
(3)With friends —19
(4)With father
(5)With other adult

How often?
(1)Several times weekly
(2)Weekly
(3)2-3 times per month
(4)Monthly —20
(5)Every few months
(6)Yearly
(7)Never

25. Did your child get any help from television in learning to sound letters? —21
(1)Yes (2)No
Read letters? —22
(1)Yes (2)No
Write letters? —23
(1)Yes (2)No

26. Was ________ learning how to read in kindergarten or in the first grade, or neither?
(1)Kindergarten —24
(2)First grade
(3)Neither

27. Would you say that ________ was in the top, middle, or low reading group in first grade?
(1)Top —25
(2)Middle
(3)Low
What about now?
(1)Top —26
(2)Middle
(3)Low

28. Could ________ write his own name before kindergarten?
(1)Yes (2)No —27

29. Does your child ever ask you to explain a word or idea from a book? — 28
(1)Yes (2)No

How often? — 29
(1)Once a day
(2)2-3 times per week
(3)Once a week
(4)2-3 times per month
(5)Monthly
(6)Less than monthly

30. What do you think about _______'s reading now? — 30
Does _______ have any problems?
(1)Yes (2)No
Can she read aloud without mistakes? — 31
(1)Yes (2)No
Does _______ know most of the words? — 32
(1)Yes (2)No
Does _______ understand what s/he is reading? — 33
(1)Yes (2)No

31. How much homework does _______ have to do? — 34
(1)Less than one hour per week
(2)2-3 hours per week
(3)Half-hour per day
(4)One hour per day
(5)More than one hour per day

32. What kind of homework does _______ have to do? __________ — 35
______________________________ — 36
____

33. Does s/he bring home textbooks for use in homework? — 37
(1)Yes (2)No

34. If _______ has trouble doing his homework, what does he do? — 38
____
____

35. Does s/he ever get help from her siblings? — 39
(1)Yes (2)No
If Yes: Which ones? (Cool bri*) — 40

36. If _______ doesn't know how to spell a word, what does he do? __________ — 41
____

37. Do you have any special concerns about your child's school work? — 42
(1)Yes (2)No
If Yes: What are they? __________ — 43
____

38. What kinds of things have teachers told you about _______? — 44
______________________________ — 45
______________________________ — 46
____

39. Does _______ ever help other siblings with homework? — 47
(1)Yes (2)No
If Yes: Which ones? __________ — 48

Writing Questions

1. Does your child like to write? —
(1)Yes (2)No

2. What kind of writing, besides homework, does your child do at home?

(Code)
(1)Once a day
(2)2-3 times per week
(3)Once a week
(4)2-3 times per month
(5)Monthly
(6)Less than monthly
(0)Never

___ a. Messages (Phone or other) ________ a — 50
___ b. Notes to friends ________ b — 51
___ c. Letters (To whom? ________)c — 52
___ d. Copying or tracing ________ d — 53
___ e. Drawing (Pictures included) ________ e — 54
___ f. Shopping lists ________ f — 55
___ g. Personal (Diary, stories, etc., specify ________)g — 56
___ h. Other paper/pencil activities ________ h — 57

3. Where did your child first learn to use a pencil?
(1)At school
(2)At home — 58

Who taught him/her?
(1)Mother
(2)Father
(3)Sister
(4)Brother
(5)Friend
(6)Other relative (specify ________)
(7)Teacher
(8)Other (specify ________) — 59

4. At how early an age did your child learn to use pencil, pen, or crayon, etc.?

(1) 0 - 1 years	(6) 3.5-4.0 years
(2) 1 - 2 years	(7) 4.0-4.5 years
(3) 2 -2.5 years	(8) 4.5-5.0 years
(4) 2.5-3.0 years	(9) 5.0-5.5 years
(5) 3.0-3.5 years	(10) 5.5-6.0 years

— — 60-1

5. a. Do you write notes or messages to ______? — 62
(1)Yes (2)No
b. About what? ________ — 63
c. How often?

(1)Once a day	(4)2-3 times per month
(2)2-3 times per week	(5)Monthly
(3)Once a week	(6)Less than monthly

— 64

(Note: Only for families where no father interview was carried out)

BIOLOGICAL FATHER OR PRINCIPAL MALE CARETAKER

1. How old is ______'s father? ______ 657

2. What was his date of birth? ______

3. Where was he born? ______ __ 67

4. Was he primarily from a rural, suburban, or urban background?
   (1) Rural
   (2) Suburban
   (3) Urban
   __ 68

5. What was the last grade completed by your husband? ______ 69-7

6. Does he plan to continue his education? __ 71
   (1) Yes (2) No (3) Don't know
   If Yes: To what level?
   (1) High school
   (2) College
   (3) Graduate school
   __ 72

7. Has he ever had any on-the-job training that you know of? __ 73
   (1) Yes (2) No (3) Don't know
   If Yes: What kind? ______ __ 74

8. Employment:
   Is Mr. ______ now employed? __ 75
   (1) Yes (2) No
   If No: Is he looking for work? __ 76
   (1) Yes (2) No
   If Yes: What are his hours? ______ __ 77

9. Is he employed full-time (35+ hours per week) or part-time (less than 35 hours per week)? __ 78
   (1) Full-time
   (2) Part-time

10. What is his job? ______ 79-8

11. What exactly does he do? ______ Card # 1-
    ______ Card ID Kid ID

12. What kind of business (industry) is that? ______

13. What does his firm (organization) make (do)? ______ 4-
    ______

14. (Note: Do not ask, if obvious)
    Is he self-employed or salaried?
    (1) Self-employed
    (2) Salaried
    __ 6

15. How long has he been working there (at this job)? ______ 7-
    ______

16. (Father's (male caretaker's) involvement with the child)

Does __________ (father) ever spend time alone with __________ (target child)?

(1) Almost every day
(2) At least once a week — 9
(3) Occasionally
(4) Never

17. If an emergency arose and you had to leave town, would you leave ________ (target child) with ________ (father)? — 10
(1) Yes (2) No

18. Does ________ (father) make a point of being present for events like:

Code: (1) Always
(2) Sometimes
(3) Never

a. Birthday parties? __________ __________ 11
b. Family emergencies? __________ __________ 12
c. Visits to doctor? __________ __________ 13
d. Conference with teacher? __________ __________ 14
e. Other? __________ __________ 15

19. Are there activities that ________ (target child) engages in only with his/her father?
(1) Yes (2) No

(1) Going for a drive? __________ __________ 16
(2) Going to ballgames or movies? __________ __________ 17
(3) Getting help with homework? __________ __________ 18
(4) Painting, fixing or washing the car? __________ __________ 19
(5) Other? __________ __________ 20

APPENDIX D: CHILD INTERVIEW

Categories of Information

1) General Information
2) Child's Perception of Literacy and School
3) Child's Perception of Parent's Goals
4) Child's Emotional Relationship with Parents
5) Child's Daily/Weekly Schedule
6) Writing
7) For Children Whose Parents are Divorced

I'm going to ask you many questions about how you feel about school, reading and writing, your family, friends, and generally, what you do with your time. Some of the questions will be easy and will simply need a yes or no answer. Other questions are much harder, and you'll have to think about your answer. There are no right answers to any of these questions, as long as you really believe what you're telling me is true. Since the interview is for students in second, fourth, and sixth grades, some of the questions may be too hard for you to understand, and some may be too easy. Be sure to stop me if you don't understand something I've asked.

I. General Information

1. Birthdate (age) ____________________
   - (1) 7
   - (2) 8
   - (3) 9
   - (4) 10
   - (5) 11
   - (6) 12 ☐
   - (7) 13

2. Grade ____________________
   - (1) second
   - (2) fourth ☐
   - (3) sixth

3. Sex ____________
   - (1) Male ☐
   - (2) Female

4. Names of Siblings | Ages of Siblings

Names of Siblings	Ages of Siblings	
____________	____________	☐☐
____________	____________	☐☐
____________	____________	☐☐
____________	____________	☐☐

(code ages as given, for ex., 1 for 1, 2 for 2, etc.)

II. Child's Perception of Literacy and School

1. Do you like school?
(1) Yes
(2) No

Why? ____________________

____

____

____

2. Who's been your favorite teacher so far?

____

a. What do you like about your teacher this year? (Probe for attention giving, approachability, sensitivity to child's particular needs as perceived by child, etc.)

____

____

____

____

b. What don't you like about your teacher this year? (Probe as above)

____

____

____

____

c. Do you ever talk to him/her before or after school?
(1) Yes
(2) No

3. Think about your kindergarten teacher. What did you like about him/her? (probe for affective areas and outstanding events)

____

____

____

Now let's talk about your first grade teacher. What did you like about him/her?

How about your second grade teacher?

And your third grade teacher?

What about your fourth grade teacher?

Fifth grade?

Sixth grade?

4. How hard do you think school is?
   (1) Real hard
   (2) Pretty hard
   (3) Not so hard

5. How hard do you work at your schoolwork? (at school, not homework)
   (1) Real hard
   (2) Pretty hard
   (3) Not so hard

6. Let's think about times when you don't understand something in school. Can you think of a time today or yesterday or just a little while ago when that happened? What happened and what did you do about it? Describe situation briefly and code child's reaction as one or more of the following. (Rank order, if necessary).
(1) Go to teacher______________________
(2) Ask a classmate______________________
(3) Try to figure it out by myself_______________
(4) Do nothing and try to continue without any help________ 1st 2nd
(5) Other (specify)______________________________ ☐☐

7. What is your favorite subject in school?
(1) Reading
(2) Writing
(3) Math
(4) Science
(5) Art
(6) Music
(7) Physical Education
(8) Social Studies
(9) Recess
(10) Other ☐☐

a. What do you like about it, why is it your favorite?
(1) It's easy
(2) It's interesting
(3) Fun projects involved
(4) Other ☐
b. What is your second favorite subject? ☐☐
(code 1 - 10 as above)
Why do you like that one?
(1) It's easy
(2) It's interesting
(3) Fun projects involved
(4) Other ☐
c. Which subject do you not like the most? ☐☐
(code 1 - 10 as above)
Why?
(1) Too much work
(2) Boring
(3) Don't understand
(4) Poor grades
(5) Other (Specify______________________) ☐
d. What subject do you make your best grades in? ☐☐
(code 1 - 10 as above)

8. What kinds of grades do you get? (generally speaking)
(1) mostly A's
(2) mostly B's
(3) mostly C's
(4) mostly D's
(5) mostly F's
(6) other (specify____________________________) ☐

9. Do you feel happy about the grades you get?
(1) Yes
IF NO: Probe for why and check appropriate category of response:
(2) Not "smart" enough or unable to make good grades
(3) Not doing his/her best work, could make better grades
(4) Thinks teacher is unfair or wrong in his/her grading
(5) My parents think I could do better
(6) Other (Specify______________________) ☐

10. At school, how much work is there to do?
(1) Too much work
(2) Just the right amount
(3) Not enough to keep me busy
(4) Other (Specify______________________) ☐

11. Let's talk about what happens in your classroom during a typical day.

a. Is there a librarary corner in your room?
(1) Yes ☐
(2) No
b. Do you usually understand your teacher when she's talking or giving directions?
(1) Yes ☐
(2) No
c. Can you read your assignments?
(1) Yes ☐
(2) No
d. Do you work on projects in class?
(1) Yes ☐
(2) No
(3) Sometimes
What kinds of projects?_______________________________
(probe for reading and writing activities)
____
____ ☐
e. How often do you write at school?
(1) More than once a day
(2) Once a day
(3) Once a week
(4) 2 - 4 times a week
(5) Every other week
(6) Every so often
(7) Other (specify_______________________) ☐

f. What kinds of writing do you do at school?
(probe for mechanical practice, copying, composition)

____

____

____

12. Have you had to miss any school days this year?
(1) No
a. If YES, code for why:
(2) Sick
(3) Vacation
(4) Helping 'parent'
(5) Death in family
(6) Other
b. If you miss school, do you miss:
(1) Just every once in a while
(2) Quite a bit
(3) Regularly (i.e. same day every week)
(Code 0 if not applicable)
c. How many days altogether?____________
Why?____

____
d. What's the most you've ever been absent at one time?
(School days)
(1) one to three days
(2) three to five days
(3) six to ten
(4) more than ten
e. How do you feel about it when you have to miss school?
(PROBE AND NOTE WHICH OF BELOW BEST FITS CHILD'S ANSWER)
(1) Worried about getting behind or missing something important
(2) It's fun to miss school
(3) It doesn't make much difference
(4) Feel indifferent about it (no opinion)
(5) Other (Specify________________________)

13. Do your (parents) mind if you miss school?
(1) Yes
(2) No

14. Do they sometimes let you miss school even if you are not sick or anything?
(1) Yes
(2) No
Why?____

____

15. Do you think school is important?
(1) Yes
(2) No
IF NO: probe why: (1) What would you rather do?
(2) What do you think is more important?
(Code 0's if not applicable)

16. IF YES: PROBE AND CODE
(Code 0's if not applicable)
(1) Social pressure (punishment and reward from others, e.g. I'll get in trouble if I don't go)
(2) Education is fun and good in itself (e.g. It's important to know things, it's fun)
(3) Important for a specific goal (e.g. It's important if you want a good job)
(4) Other (Specify______________________)

17. Who's the smartest person you know______________________

b. What makes them smart?______________________

18. Do you have homework to do?
(1) Yes
(2) No
IF NO: CODE 0's FOR REMAINING PARTS OF # 18 AND SKIP TO # 19)
IF YES:
a. How often?
(1) Everyday
(2) Every other day
(3) Once a week
(4) Every so often
(5) Other (Specify______________________)
b. Do you do your homework mostly at school or at home?
(1) School
(2) Home
(3) Both
c. Do you usually get your homework in on time or is it sometimes late? (PROBE AND CODE)
(1) Usually on time
(2) Sometimes late
(3) Late a lot
If (2) or (3):
Why? PROBE
(1) Not enough time
(2) I forget
(3) I can't do it at home because of noise, etc.
(4) Other (Specify______________________)
(Code 0 if not applicable)

d. Do you think homework is important?
(1) Yes
(2) No ☐
e. What would happen if you didn't do your homework?
(1) Nothing
(2) Punishment
(3) Wouldn't learn as much
(4) Other (Specify________________________) ☐
f. If punished, from whom?
(1) Parents
(2) Teachers
(3) Other (Specify__________________) ☐
(CODE 0 IF NOT APPLICABLE)
g. If you are working on your homework and you get stuck on something, do you go to anybody for help?
(1) Occasionally
(2) Most of the time ☐
(3) No
(IF NO, CODE 0 and 00 FOR THE REMAINING PARTS OF g AND GO TO h)
If (1) or (2):
Who do you usually go to?
(1) Mother
(2) Father
(3) Brother
(4) Sister
(5) Friend
(6) Other relative or other (Specify________________) ☐

Who else do you go to?________________________________
____ ☐☐

h. (Only for negative responses to g; otherwise, code 0 and skip)
If you don't go to anybody for help, what do you do about being stuck?
(1) Quit
(2) Figure it out myself ☐
(3) Try to go on without that answer
i. Can your (parents) help you with your homework?
(Probe for ability and availability)
(1) Yes ☐
(2) No
IF NO: Why not?_______________________________________
____ ☐☐
(CODE 0 IF NOT APPLICABLE)
IF YES:
Do they give good help or is it confusing a lot of times?
(1) Good help mostly ☐
(2) Usually confusing
(CODE 0 IF NOT APPLICABLE)

19. Let's talk about your friends for a minute.

a. Who is your best friend at school?____________________

b. How old is he/she?

(1) 6
(2) 7
(3) 8
(4) 9
(5) 10
(6) 11
(7) 12
(8) 13
(9) 14

c. What grade is he/she in?

(1) K
(2) 1
(3) 2
(4) 3
(5) 4
(6) 5
(7) 6
(8) 7

d. How did you become best friends with________________?

____

____

e. What kinds of grades does your friend get?

(1) mostly A's
(2) mostly B's
(3) mostly C's
(4) mostly D's
(5) mostly F's
(6) don't know

f. Who else is your friend at school?____________________

g. How did you become friends with____________________?

____

____

h. What kinds of grades does your friend get?

(1) mostly A's
(2) mostly B's
(3) mostly C's
(4) mostly D's
(5) mostly F's
(6) don't know

i. Do your friends like to read?

(1) yes
(2) no
(3) don't know

20. Let's talk about reading books for a minute.
(Interviewer: NOTE: Anytime 'book' is mentioned, include any reading material in definition.)

a. How much do you like to read books?
(1) a lot
(2) some
(3) not much
(4) I hate it

Why?____

____

b. How fast do you think you read?
(1) really fast
(2) about average
(3) slower than most

c. Have you read a book lately that you didn't have to read but you just wanted to?
(1) no
(2) yes
What book?____________________________________
What other 'books' have you read for fun outside of school?

Name	# of times read	Where from

d. What books have you read in school lately?

Name	# of times read	Where from

e. What is your favorite book?____________________________________

f. Second favorite?____

g. Who are the authors of some of your favorite books?

____

____

h. What don't you like to read about?____________________

____

i. Do you wish you had more time for reading?
(1) yes
(2) no

j. Would you rather read or watch TV?
(1) read
(2) watch TV

k. Does anyone in your family sit down and read to you or let you read to them? (Or used to read, if child is older)
(1) No
(2) Yes

Who	How often	What kinds of rdg.	What books

l. Does anyone buy books for you? (Family or otherwise)
(1) No
(2) Yes
If (2), who?____
____
(CODE 0 IF NOT APPLICABLE)
What kind of material and title?___________________________
____
(CODE 0 IF NOT APPLICABLE)

m. How many books do you have that are yours?
(1) 1 - 5
(2) 6 - 10
(3) 11 - 20
(4) more than 20 (CODE 0 IF NOT APPLICABLE)
Where do you keep them?
(1) my room
(2) livingroom
(3) kitchen
(4) elsewhere (Specify___________________________________)
(CODE 0 IF NOT APPLICABLE)
Do you share them with anyone? (Probe for obligation to share)
(1) brother
(2) sister
(3) more than one sibling
(4) other (Specify____)
(5) doesn't share them
(CODE 0 IF NOT APPLICABLE)

n. Does your mother like to read?
(1) yes
(2) no
If so, what? (1) books (2) magazines (3) newspapers
(4)other (Specify___________________________)
(CODE 0 IF NOT APPLICABLE)

o. Does your 'father' like to read?
(Interviewer: NOTE: 'father' means the most dominant male figure)
(1) yes
(2) no ☐
If so, what? (1) books
(2) magazines
(3) newspapers
(4) other (Specify____________________) ☐
(CODE 0 IF NOT APPLICABLE)

p. Who else in the 'family' reads?
(1) sister(s)
(2) brother(s)
(3) other (Specify____________________) ☐

q. Who in your 'family' reads the most?
(1) mother
(2) father
(3) sister
(4) brother
(5) self
(6) other (Specify____________________) ☐

r. Does your family get a newspaper?
(1) yes ☐
(2) no
Magazines? (1) yes ☐
(2) no
Do you read the newspaper or magazines?
(1) yes ☐
(2) no
What sections?
(1) news
(2) comics
(3) letters
(4) ads
(5) sports
(6) horoscope
(7) other (Specify____________________) ☐

Why?____
____ ☐☐

s. Do you ever go to the Public Library?
(1) No (Code remaining parts of s '0' and skip to t) ☐
(2) Yes

Who takes you, or do you go by yourself?
(1) mother
(2) father
(3) brother
(4) sister
(5) other (Specify____________________) ☐
(6) self

How often do you go?
(1) more than once a week
(2) once a week
(3) every two weeks
(4) once a month
(5) less than once a month
(6) other (i.e. when books are due, when mom goes shopping, quite a bit, sometimes, etc. Specify________________________) ☐

Does anyone help you choose books sometimes?
(1) mother
(2) father
(3) brother
(4) sister
(5) other (Specify________________________) ☐
(6) no one

Do you have your own library card?
(1) yes ☐
(2) no

t. How important do you think reading is?
(1) real important
(2) pretty important ☐
(3) not too important

u. What would happen, do you think, if you grew up and didn't learn how to read?

____

____ ☐☐

____

v. How well do you think you read?
(1) very well
(2) pretty good
(3) fair
(4) poor ☐
(5) bad

w. Are you in a reading group at school?
(1) yes ☐
(2) no (IF NO: CODE x '0' AND SKIP TO y)
IF YES: Which one?________________________ ☐☐

x. Do you like the book you read for reading group?
(1) Yes ☐
(2) No

y. Do you get bored with reading at school?
(1) No ☐
(2) Yes

Why?____ ☐☐

____

z. Do you like to play word games? (e.g. scrabble, boggle, crossword puzzles)
(1) Yes
(2) No
If yes: Which ones?______________________________________
____
If no: code 0

aa. Do you own any word games?
(1) Yes
(2) No

bb. Do you know how to look up a word in a dictionary?
(1) Yes
(2) No

cc. Do you ever use a dictionary at home?
(1) Yes
(2) No
When at school?
(1) Yes
(2) No

dd. What do you do when you are reading at home and you don't know a word?
(1) ask someone
(2) look the word up
(3) use context
(4) skip the word

ee. When did you learn to read?
(1) age 2
(2) age 3
(3) age 4
(4) age 5
(5) age 6
(6) age 7
(7) don't know

ff. How did you learn to read?______________________________
____

gg. Who taught you to read?
(1) mother
(2) father
(3) sibling
(4) other relative (Specify_____________________________)
(5) friend
(6) teacher
(7) self
(8) don't know

hh. Do you ever read aloud to yourself when no one's listening?
(1) Yes
(2) No

ii. What do you want to be when you grow up?______________
____

III. CHILD'S PERCEPTIONS OF PARENTS' GOALS

1. Now let's talk about your (parents) and how they feel about your schoolwork. (Interviewer: NOTE: 'parents' means the most dominant caretakers--adult, friend, or sibling)

a. Do your 'parents' see your report card?
(1) Yes
(2) No

b. Do they like the grades you get?
(1) Yes
(2) No
(IF "yes and no" then probe for specifics: e.g. how do you know, reaction of parent? etc.)

(CODE 0 IF NOT APPLICABLE)

c. How hard do your 'parents' think you work in school?
(1) real hard
(2) pretty hard
(3) not so hard

d. How do they know how hard you work? (PROBE)

e. Do they wish you would work harder or do they think you work hard enough?
(1) work harder
(2) hard enough
How do you know/why? (PROBE)

f. What happens when you bring home good work from school?
(PROBE FOR SPECIFIC CASE OR TWO)

g. What happens when you bring home poor work?
(PROBE FOR SPECIFIC CASE OR TWO)

2. Do you wish your 'parents' would pay more or less attention to your schoolwork?
(1) more
(2) less
(3) don't know
(4) fine as is

3. Do your 'parents' ever come to school to meet your teacher?
   (1) no
   (2) yes
   IF YES: when, what for?
   (1) on their own
   (2) because they've been asked
   (3) because it's "open house"
   (4) other (Specify______________________________)
   (CODE 0 IF NOT APPLICABLE)

IV. CHILD'S EMOTIONAL RELATIONSHIP WITH PARENTS (SCALES)

NURTURANCE SCALE

(NOTE # 1 AND # 2 CHOICES IF TWO RESPONSES ARE GIVEN: # 1 choice in left-hand column, # 2 choice in right-hand column)

1. When something really good happens to you, whom do you tell about it?
(1)mother (2)father (3)brother (4)sister (5)friend (6)relative
(7)other (Specify____________________) (8)nobody

2. When you have done something nice at school, e.g. a picture, a good paper, you did well in sports, whom do you tell about it?
(1)mother (2)father (3)brother (4)sister (5)friend (6)relative
(7)other (Specify____________________) (8)nobody

3. When you need help with schoolwork, whom do you ask to help you?
(1)mother (2)father (3)brother (4)sister (5)friend (6)relative
(7)other (Specify____________________) (8)nobody

4. When you have a fight with your friend, whom do you tell about it?
(1)mother (2)father (3)brother (4)sister (5)friend (6)relative
(7)other (Specify____________________) (8)nobody

5. When you do not feel good, when you are upset or unhappy, with whom do you want to be?
(1)mother (2)father (3)brother (4)sister (5)friend (6)relative
(7)other (Specify____________________) (8)nobody

6. When you are afraid, when you have a bad dream, whom do you tell about it?
(1)mother (2)father (3)brother (4)sister (5)friend (6)relative
(7)other (Specify____________________) (8) nobody

7. When you have a problem that you want to talk about, whom do you tell about it?
(1)mother (2)father (3)brother (4)sister (5)friend (6)relative
(7)other (Specify____________________) (8)nobody

8. Who helps you best with problems and worries?
(1)mother (2)father (3)brother (4)sister (5)friend (6)relative
(7)other (Specify____________________) (8)nobody

9. With whom can you talk best about things that are important to you?
(1) mother (2) father (3) brother (4) sister (5) friend (6) relative
(7) other (Specify________________________) (8) nobody ☐

SOURCE: ELISABETH SAUNDERS
UNPUBLISHED DOCTORAL DISSERTATION, HARVARD UNIVERSITY

PUNISHMENT SCALE[1]

I will read to you some ways in which children get punished. Tell me whether you get punished in these ways and approximately how often. (NOTE: Have the child tell you in his/her own words; code it yourself).

Coding system:

(1) almost every day
(2) about once a week
(3) about once a month
(4) once or twice a year
(5) never

1. I get sent out of the room. ☐
2. I am not allowed to play with other children. ☐
3. I get sent to bed early. ☐
4. My parents tell me they will spank me. ☐
5. I get slapped. ☐
6. I get spanked. ☐
7. I have to do extra work. ☐
8. I am not allowed to do things I like. ☐
9. My parents tell me that other children behave better then me. ☐
10. My parents nag me. ☐
11. My parents scold me and yell at me. ☐

---

[1] ALL ITEMS ARE TAKEN FROM BRONFENBRENNER'S "QUESTIONNAIRE FOR CHILDREN CONCERNING PARENTAL BEHAVIOR." (SIEGELMAN, 1965).

SOURCE: BRONFENBRENNER
DISCUSSED IN SIEGELMAN, M. EVALUATION OF BRONFENBRENNER'S QUESTIONNAIRE FOR CHILDREN, CHILD DEVELOPMENT, 32, 373-378, 1961.

The following sentences are arranged to find out how you feel about your life at home. The right answers are your true feelings about each sentence.

Coding system:

(1) Yes (3) Sometimes
(2) No (4) Don't know

1. It is hard for me to feel good at home. ☐
2. My parents criticize me too much. ☐
3. My parents have faith in me. ☐
4. As far as ideas are concerned, my parents and I live in different worlds. ☐
5. My parents get angry easily. ☐
6. I get what I should at home. ☐
7. When they make me mind, my parents are nice about it. ☐
8. As I have known it, my family life is happy. ☐
9. My parents nag at me. ☐
10. My parents are mean to me. ☐
11. I find more understanding at home than elsewhere. ☐
12. My parents are fair with me in money matters. ☐
13. My parents fight with me a lot. ☐
14. It is hard for me to be pleasant and happy when my parents are around. ☐
15. I am happy and feel pretty calm at home. ☐
16. My parents tell other people things about me that I think they should not mention. ☐
17. I have to keep quiet or leave the house to keep peace at home. ☐
18. I am "picked on" at home. ☐
19. My parents take an interest in the things I like. ☐
20. My parents are what I think perfect parents should be. ☐

21. I believe that my parents think I will not turn out to be much in the end. ☐
22. I feel that my parents do not trust me. ☐
23. There is real love and affection for me at home. ☐
24. My parents try to understand my problems and worries. ☐
25. My parents compare me unfavorably with other children. ☐
26. My parents irritate me. ☐
27. We have good times together at home. ☐
28. I feel comfortable at home. ☐
29. I talk over important plans with my parents. ☐
30. I often have good times at home with my family. ☐
31. I wish that I had different parents than the ones I have. ☐
32. My friends have happier homes than I do. ☐
33. I feel that my parents try to trick me. ☐
34. My parents take the attitude of "Oh, you don't want to do that" to the things I would like to do. ☐
35. I enjoy going out with my parents. ☐
36. My parents criticize me unfairly. ☐
37. I feel nervous at home. ☐
38. Other people understand me better than my parents do. ☐
39. My parents say that I am not as nice to them as I should be. ☐
40. My parents expect too much from me. ☐
41. My parents point out my faults to my friends. ☐
42. I think that my parents try to mislead me. ☐
43. I feel like leaving home for good. ☐
44. I feel that my parents are pleased with me. ☐
45. My parents usually treat me fairly and sensibly. ☐
46. When I ask my parents if I may do something they say "no". ☐

47. My parents can be completely trusted. ☐

48. I change from loving my parents to hating them and back again. ☐

49. I feel "close" to my parents. ☐

50. I know that my parents are my friends. ☐

SOURCE: SWANSON, G.W. THE DEVELOPMENT OF AN INSTRUMENT FOR RATING CHILD-PARENT RELATIONSHIPS. SOCIAL FORCES, 29, 84-90, 1950.

CHILDREN'S LOCUS OF CONTROL SCALE
(abbreviated Nowicki-Strickland Scale)

In this part, I am trying to find out how kids your age think about certain things. This isn't a test--there are no right or wrong answers to these questions. Some kids say "YES" and some say "NO". So just answer YES or NO depending on how you feel. Sometimes, kids don't understand these questions because they're hard to understand, so if you don't understand a question, let me know and I'll explain it.

Coding system:

(1) Yes
(2) No

1. Do you believe that most problems will solve themselves if you just don't fool with them? ☐

2. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway? ☐

3. Do you feel that most of the time parents listen to what their children have to say? ☐

4. Do you believe that wishing can make good things happen? ☐

5. Do you feel that it's nearly impossible to change your parent's mind about anything? ☐

6. Do you feel that when you do something wrong there's very little you can do to make it right? ☐

7. Do you believe that most kids are just born good at sports? ☐

8. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them? ☐

9. Most of the time do you find it useless to try to get your own way at home? ☐

10. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters? ☐

11. Do you usually feel that you have little to say about what you get to eat at home? ☐

12. Do you feel that when someone doesn't like you there's little you can do about it? ☐

13. Are most of the other kids your age stronger than you are? ☐

14. Do you feel that one of the best ways to handle most problems is just not to think about them? ☐

15. Do you feel that when a kid your age decides to hit you, there's little you can do to stop him or her? ☐

16. Have you felt that when people were mean to you it was usually for no reason at all? ☐

17. Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you are? ☐

18. Are you the kind of person who believes that planning ahead makes things turn out better? ☐

19. Most of the time, do you feel that you have little to say about what your family decides to do? ☐

V. CHILD'S DAILY/WEEKLY SCHEDULE

Now let's think about what you do everyday and what time you usually do things.

1. What time do you get up on school days?
   (1) 5:30 - 6:00
   (2) 6:00 - 6:30
   (3) 6:30 - 7:00
   (4) 7:00 - 7:30
   (5) 7:30 - 8:00
   (6) 8:00 - 8:30
   (7) 8:30 - 9:00
   (8) later than 9:00 ☐

2. Who/what wakes you up? (How do you know when it's time to wake up?
   (1) mother
   (2) father
   (3) sibling
   (4) other relative (Specify______________________________)
   (5) alarm clock
   (6) other (Specify____________________________________) ☐

3. Do you have breakfast?
   a. (1) Yes
      (2) No
      (3) Sometimes
   b. IF YES: When? (Code, 1 - 8 as in # 1 above. IF NO, CODE REMAINING SECTIONS OF # 3 '0' AND SKIP TO # 4)
   c. IF YES: Where?
      (1) at home
      (2) at school
      (3) other (Specify______________________________)
   d. IF YES: Who fixes it?
      (1) parent
      (2) sibling
      (3) other relative (Specify______________________)
      (4) self
      (5) neighbor
      (6) friend
      (7) school
      (8) other (Specify______________________________)

4. What do you do after you've awakened and before you leave for school?

____

____

____

5. How do you get to school?
   (1) walk
   (2) public transportation
   (3) school bus
   (4) driven

   If (4)--driven-- by whom?
   (1) mother
   (2) father
   (3) sibling
   (4) other relative (Specify______________________)
   (5) neighbor
   (6) friend's "family"
   (7) other (Specify______________________________)
   (CODE 0 IF NOT APPLICABLE)

6. What time do you leave for school? (Code 1 - 8 as in # 1 above)

7. a. Are you ever late?
      (1) lots of times
      (2) sometimes
      (3) hardly ever
   b. When you are late, why does it usually happen?

____

____

8. a. Where do you go when school is out?
(1) home
(2) friend's house
(3) relative's house
(4) neighbor's house
(5) rec. center
(6) other (Specify________________________________) ☐

b. Who is usually there when you get there?
(1) mother
(2) father
(3) sibling
(4) friend
(5) friend's "family"
(6) no one
(7) other (Specify________________________________) ☐

9. a. What do you usually do in the afternoons after school?
(PROBE FOR SEQUENTIAL LISTING OF ALL AFTER SCHOOL ACTIVITIES:
E.G. SNACK, PLAY, TV, ETC. THROUGH TO BEDTIME)

Time	Activity	Place

☐☐

b. Do you do pretty much the same things everyday after school?
(1) Yes
(2) No ☐

IF NO: IF THINGS ARE DIFFERENT SOMETIMES, WHAT CHANGES?
PROBE FOR SPECIAL ACTIVITIES OR THINGS WHICH ARE
DISRUPTIVE OF A MORE REGULAR SCHEDULE) (CODE 0 IF NOT
APPLICABLE)

____

____

____

____ ☐☐

c. What is your favorite thing to do for fun after school?

____

____ ☐☐

10. How many t.v. sets do you have in your house (that are working)?
   (1) 0 (if 0, code remaining t.v. questions (to #38) '0' and skip to #39)
   (2) 1
   (3) 2
   (4) more than 2 ☐

11. Is it color or black and white?
   (1) color
   (2) black and white ☐
   Second t.v. (if applicable; otherwise, code 0 and skip)
   (1) color
   (2) black and white ☐

12. In what room is the t.v.?
   (1) livingroom
   (2) kitchen
   (3) den
   (4) parent's bedroom
   (5) child's bedroom
   (5) other (Specify______________________________) ☐

13. Who watches t.v. most often?
   (1) Dad
   (2) Mom
   (3) me
   (4) sibling
   (5) all the same ☐
   Second set (if applicable; otherwise, code 0 and skip)
   (1) Dad
   (2) Mom
   (3) me
   (4) sibling
   (5) all the same ☐
   Who watches t.v. the least?
   (1) Dad
   (2) Mom
   (3) me
   (4) sibling
   (5) all the same ☐

14. Do you have a special seat that you sit in when you watch t.v.?
   (1) Yes
   (2) No
   IF YES: Where is it?
   (1) livingroom
   (2) kitchen
   (3) den
   (4) parent's bedroom
   (5) child's bedroom
   (6) other (Specify______________________________) ☐
   (IF NO: Code 0 and skip)

15. Can you watch t.v. anytime you want or do your parents limit when you can watch?
(1) Yes (can watch anytime) ☐
(2) No (limited)
IF NO: When aren't you allowed to watch?

____

____

____ ☐☐

(IF YES: CODE 0 AND SKIP)

16.a. How often do you watch t.v.?
(1) 6 - 8 hours everyday
(2) 4 - 6 hours everyday
(3) 3 - 4 hours everyday
(4) 2 - 3 hours everyday
(5) 1 - 2 hours everyday
(6) under an hour everyday
(7) 2 - 3 times a week
(8) once a week
(9) 2 - 3 times a month
(10) once a month or less ☐☐
(11) never

(PROBE TO FIND OUT WHEN DURING THE DAY AND NIGHT CHILD WATCHES T.V.)

____

____ ☐☐

____

b. Do you watch in the morning before you go to school?
(1) Yes ☐
(2) No
IF YES: What shows?

____ ☐☐

(IF NO: CODE 0 AND SKIP)

c. After you come home from school?
(1) Yes ☐
(2) No
IF YES: What shows?

____ ☐☐

(IF NO: CODE 0 AND SKIP)

d. During dinner?
(1) Yes ☐
(2) No
IF YES: What shows?

____ ☐☐

(IF NO: CODE 0 AND SKIP)

e. In the evening?
(1) Yes
(2) No
IF YES: What shows?

____

(IF NO: CODE 0 AND SKIP)

f. How about on the weekends:
Do you usually watch on Sat. morning?
(1) Yes
(2) No
What time do you usually start watching?
(1) 6:00
(2) 6:30
(3) 7:00
(4) 7:30
(5) 8:00
(6) 8:30
(7) 9:00
(8) 9:30
(9) 10:00
(10) 10:30
(11) 11:00
(12) 11:30
(13) 12:00
(IF NO: CODE 0 AND SKIP)
Until when do you watch?
(1) 8:00
(2) before 9:00
(3) before 10:00
(4) before 11:00
(5) before 12:00
(6) before 1:00
(7) before 2:00
(8) before 3:00
(9) before 4:00
(10) before 5:00
(11) before 6:00
(12) before 7:00
(13) other (Specify________________________)
(IF NO: CODE 0 AND SKIP)

g. Sunday evening?
(1) Yes
(2) No
What shows?

____

(IF NO: CODE 0 AND SKIP)
Until when?
(1) 7:00
(2) before 8:00
(3) before 9:00
(4) before 10:00
(5) before 11:00
(6) before midnight
(7) after midnight

17. Can you watch whatever you want or are there certain programs you're not allowed to watch?
(1) can watch anything
(2) certain ones not allowed
IF (2): What aren't you allowed to watch?

(IF NOT APPLICABLE: CODE 0 AND SKIP)

18. How do you decide which t.v. programs to watch?
(1) flip channels
(2) parents decide
(3) just watch what's already on
(4) have favorite shows
(5) other (Specify ____________________)

1 2 3 4 5

(code 0 in space if that option not chosen)

19. Does your family get any kind of T.V. Guide?
(1) every week
(2) every few weeks
(3) every few months
(4) never

20. Who are your favorite t.v. characters?

21. When you're watching the t.v., do you like
(1) just to watch
(2) do something else while you're watching
a. IF JUST WATCH: How often?
(1) usually
(2) sometimes
(3) never
(IF NOT APPLICABLE, CODE 0 AND SKIP)
b. IF OTHER ACTIVITIES WHILE WATCHING: how often?
(1) usually
(2) sometimes
(3) never
(IF NOT APPLICABLE, CODE 0 AND SKIP)

What do you like to do?
(1) reading
(2) handiwork
(3) homework
(4) chores
(5) snacking
(6) eat meals
(7) cooking
(8) play games
(9) other (Specify_______________________________)

22. What are your favorite t.v. programs?

____

____

____

23. Do your parents ever let you watch extra t.v. as a reward for your good behavior?
(1) usually
(2) sometimes
(3) never

24. Do your parents ever punish you with "no t.v." for your bad behavior?
(1) usually
(2) sometimes
(3) never

25. Are there any other rules about t.v. watching in your family?
(1) Yes
(2) No
IF YES: What are they?

____

____

(IF NO: CODE 0 AND SKIP)

26. Who made these rules?
(1) mother
(2) father
(3) other (Specify_______________________________)
(4) self

27. IF TWO "PARENT" FAMILY:
How often do your parents disagree about how much t.v. you should watch?
(1) usually
(2) sometimes
(3) never
(IF NOT APPLICABLE, CODE 0 AND SKIP)

28. Have you ever bought a book, or taken one out of the library, that had to do with a t.v. program or t.v. story?
(1) Yes ☐
(2) No
IF YES: Can you name one or two?
____ ☐☐
(IF NO: CODE 0 AND SKIP)

What about after having gone to a movie? Name one or two.
____
____ ☐☐

29. If more than one person in your family is in the room where the t.v. is, who usually turns on the t.v. set?
(1) other(s) person (Specify________________________________) ☐
(2) me

30. If more than one person is in the room, who decides which channel to watch?
(1) other(s) (Specify________________________________) ☐
(2) me

31. If more than one person is in the room, who changes the channel once the t.v. set is on?
(1) other(s)(Specify________________________________) ☐
(2) me

32. Who usually turns off the t.v. set?
(1) other(s) (Specify________________________________) ☐
(2) me

33. Are there certain programs which your family watches together?
(1) Yes ☐
(2) No
IF YES: What are they?________________________________
____ ☐☐
(IF NO: CODE 0 AND SKIP)

34. What happens when different people in your family want to watch different programs at the same time? For instance, what happens if you and your dad want to watch different programs at the same time?
(1) other person makes decision without discussion
(2) other person makes decision after some discussion
(3) I decide
(4) other (Specify________________________________) ☐

a. How do you feel about that?

b. What about if you and your mom want to watch different programs at the same time?

c. When mom and dad want to watch different programs at the same time?

d. When it's you and your (brother or sister)?

e. What happens when you and your (brother or sister) are home alone and want to watch different t.v. programs at the same time? What do you do?

35. Do you own a toy that comes from a t.v. program, like a doll of a t.v. person or a game from a t.v. show?
(1) Yes
(2) No
IF YES: What?
(IF NO: CODE 0 AND SKIP)

36. What kind of t.v. program do you enjoy watching the most?
(1) situation comedy
(2) medical drama
(3) police drama
(4) soap opera
(5) cartoons
(6) game shows
(7) movies
(8) sports
(9) news
(10) educational
(11) religious
(12) other (Specify)

Why?

What kind of t.v. program do you enjoy watching the least?
(1) situation comedy
(2) medical drama
(3) police drama
(4) soap opera
(5) cartoons
(6) game shows
(7) movies
(8) sports
(9) news
(10) educational
(11) religious
(12) other (Specify ______________________________)

Why? ______________________________

____

37. If your t.v. broke, what would you do instead?

____

____

____

38. Why do you watch t.v.? (PICK TOP THREE AND RANK ORDER THEM)
(1) instruction (to learn how to do something, such as cooking, auto repair, languages, etc.)
(2) entertainment
(3) information
(4) learn about human relationships (to see how people relate in different situations)
(5) to get away from problems (school, chores, etc.)
(6) to get away from people (family, friends, etc.)
(7) to be with people (family, friends)
(8) conversation topics (to be able to talk with friends, family, etc.)
(9) to avoid loneliness (to have companionship when alone)
(10) to pass time (to help time go by more quickly)
(11) commercials
(12) relaxation
(13) to avoid work (housework, homework)
(14) to avoid conflict with family members
(15) other (Specify ______________________________)

1st 2nd 3rd

39. a. Do you have a special time to do your homework?
(1) No
(2) Yes

b. Do you have a special place to do your homework?
(1) No
(2) Yes

Where?
(1) own room
(2) a study
(3) kitchen
(4) corner in house
(5) basement
(6) other (Specify________________________________) └┘
(IF NO: CODE 0 AND SKIP)

40. a. What time do you go to bed?
(1) 7:00
(2) 7:30
(3) 8:00
(4) 8:30
(5) 9:00
(6) 9:30
(7) 10:00
(8) 10:30
(9) 11:00
(10) 11:30
(11) 12:00
(12) after midnight └┴┘
b. Who tells you when it's time for bed?
(1) mother
(2) father
(3) sister
(4) brother
(5) other relative (Specify________________________________)
(6) no one
(7) other (Specify________________________________) └┘
c. Who puts you to bed? └┘
(see (b) for coding)

41. What do you like to do on Saturdays and Sundays? (PROBE)

____

____

____

________________________________ └┴┘

42. What do you do most of the time on weekends?

____

____

____

________________________________ └┴┘

43. a. Do you have chores at home that only you do?
(1) Yes
(2) No
b. IF YES: What are they? (PROBE)

(IF NO: CODE 0 AND SKIP)
c. How often:
(1) daily
(2) 2 - 3 times a week
(3) once a week
(4) 2 - 3 times a month
(5) "every so often"
(IF NOT APPLICABLE, CODE 0 AND SKIP)

44. Do you ever go out to places with your (parents) or other grown-ups in your family?
(1) No
(2) Yes
IF YES: with whom? (mother, father, both parents, cousins, aunts/uncles, grandparents, other, etc.)
Where? (chores, entertainment, "field trips" day or longer trips, etc.)
How often? (daily, etc.: see (c) above)
(IF NO: CODE 0 AND SKIP)

With whom	Where	How often

45. Do you ever go to visit relatives?
(1) No
(2) Yes IF YES:

With whom	Where	How often

(IF NO: CODE 0 AND SKIP)

VI. WRITING

1. At home are the following available?
    - (1) crayons
    - (2) pencils
    - (3) pens
    - (4) paints
    - (5) paper/pads

1 2 3 4 5

(Put 0's if not owned)

2. Do you have your own/share:
    - (1) crayons
    - (2) pencils
    - (3) pens
    - (4) paints
    - (5) paper/pads

1 2 3 4 5

(Put 0's if not owned/shared

3. Do you ever write:
    - (1) notes to friends
    - (2) letters (to whom?________________________________)
    - (3) shopping lists
    - (4) for fun (to self--diary, stories:________________)
    - (5) other (Specify____________________________________)

1 2 3 4 5

(Put 0's if not written)

4. Where did you learn to use a pencil?
    - (1) at school
    - (2) at home

    Who taught you?
    - (1) mother
    - (2) father
    - (3) sister
    - (4) brother
    - (5) friend
    - (6) other relative (Specify___________________________)
    - (7) teacher
    - (8) other (Specify____________________________________)

5. What would happen if you grew up and didn't know how to write?

____

____

6. Do you like to write?
    - (1) Yes
    - (2) No

    Why?____

____

VII. FOR CHILDREN WHOSE PARENTS ARE DIVORCED

1. How often do you see your father (mother)?
   (1) more than once a week
   (2) once a week
   (3) every two weeks
   (4) once a month
   (5) less than once a month
   (6) other (Specify ____________________________________)

2. What do you do together?

____

____

APPENDIX E:

Families and Literacy Project
Harvard Graduate School of Education

June 1981

PART I: QUESTIONS ABOUT THE CLASS

1. What grade(s) did you teach this year? _____

2. What is the age range of the children in your class now?

    ____years old to ____years old

3. How many students were enrolled in your class as of June 1st?

    _____

4. Of these students enrolled in your class as of June 1st, how many spoke English at home?

    _____

5. The socio-economic status (SES) of the students in your class this year was (check the best description):

    ___primarily low SES ___primarily middle SES

    ___low and middle SES ___middle and high SES

6. Please break down your June 1st students by ethnic group, giving the number of students that belong to each group below:

    Black:____ White:____ Hispanic:____

    Other Minority:____
    (e.g. Chinese)

7. Do you have some form of team teaching involving the children in your room?

    ___ yes ___ no

    If yes:
    Could you briefly explain what this team teaching involves?

    ____

    ____

8. What subjects were taught to your students by specialist teachers?

    ____

    ____

9. About what percentage of the time did you, rather than the students, select materials and direct activities in lessons this year?

about _____%

Would you like to have the students in your class select materials and direct activities:

___more of the time ___about the same as they do now ___less of the time

10. Which outside of school trips were you and your students involved in this year? (check as many as apply):

__museum/historical (e.g. Sturbridge Village, Museum of Our National Heritage)

__museum/art (e.g. Museum of Fine Arts, DeCordova Museum)

__museum/science, technology (e.g. Children's Museum, Museum of Transportation)

__recreation area (e.g. roller-skating rink, amusement park)

__nature area/natural history musuem (e.g. Thompson's Island, Drumlin Farm)

__concert or dance performance

__play

__workplace (e.g. The Boston Globe, ice cream factory)

__other_________________________________
(please describe it)

11. Did you visit the library with your class this year?

___ yes ___ no

If yes:
What kind of library was it?

___ in-school library ___ public library

About how often did you visit the library?

____

12. Do students have work that you assign for them to do outside of class?

___ yes ___ no

If yes:
How often do you assign this?

___ every school night ___ two or three times a week

___ once a week ___ every few weeks

13. If you gave homework this year, which subjects did you assign it in? (check as many as apply):

__ reading __ English __ math __ social studies

__other ____________________

14. If you gave homework, what did it typically consist of? (please check the one best description):

__ workbook or worksheet __ writing assignment

__ reading assignment __ reading assignment with questions

__ other ____________________ (please describe it)

Is there some time during the school day when students can complete their homework assignments?

___ yes ___ no

15. Would you like to be able to assign more homework than you do now?

___ yes ___ no

If yes:
What are problems you see in giving more homework?

____

____

____

16. Which materials did you use to teach reading to your class this year? (check as many as apply):

__basal series (please give publisher's name and series, e.g. Ginn 360): ____________________

__workbook that goes with this basal reader

__"trade" books (e.g. paperbacks, library books)

__skills workbook/worksheets in word attack (please give series and/or publisher, e.g. Phonics is F[illegible]): ____________________

__teacher-written stories

__teacher-written worksheets

__skills workbook/worksheets in comprehension, study skills (please give series and/or publisher, e.g. Barnell-Loft): ____________________

__other (please describe): ____________________ ____________________

16. Did you have reading groups this year?

___ yes ___ no

If yes:
How many reading groups did you have? ____

17. If you had reading groups, how did you assign children to them at the beginning of the year?
(check the one which best describes your method):

___previous teacher's recommendation ___informal judgment of your own

___standardized test score on student records ___your own testing

18. Did you move children from one reading group to another during the school year?

___ yes ___ no

If yes:
What were reasons why you moved them? ____________________

____

About how many children were moved? ____

19. Which reading skills did you consider most important and emphasize most with your class this year?

__word attack: phonics

__word attack: structural analysis (breaking down word parts, etc.)

__literal comprehension (main idea, details, etc.)

__vocabulary

__study skills

__speed reading

__critical thinking/reasoning

__other (please describe):____________________

____

20. Did you choose the reading program (materials, skills to be emphasized, methods) for your class yourself?

___ yes ___ no

If no:
Who helped make the decisions about the reading program for your class? ____________________

4. About how far in the reader/textbook did ____________________ get this year?

__less than halfway __halfway to three quarters of the way

__nearly completed __ completed

5. Who instructs ________________ in reading? (check as many as apply):

__classroom teacher alone __aide

__learning disabilities teacher __reading specialist

__Title I teacher __other adult (please explain who this is):

____

If another person (other than you) instructs ________________ in reading, when does ________________ receive this help?

__during regular reading group time

__during language arts (English, spelling, etc.)

__during math or science

__during social studies

__some other time

How many days a week does ______________ get this reading instruction from someone else?

____

Does this instruction take place outside your classroom?

___ yes ___ no

6. If ____________________ is in a reading group, how many days a week does his/her group meet?

____

How long does this reading group usually last?

___15-30 minutes ___30-45 minutes

___45-60 minutes ___more than 60 minutes

7. Is there a single skill or group of skills you've emphasized most in reading for ________________ or his/her group?

___ yes ___ no

If yes:
Could you explain what it is? ________________________________

PART II: QUESTIONS ABOUT THE TARGET CHILD

1. When ______________ entered your class in the fall, how well prepared was he/she in reading compared to most students?

__better prepared than most students

__about average

__weaker than most students

What factors (e.g. home, school, ability, motivation, etc.) do you think contributed to this child's level of preparation in reading?

____

____

2. Which reading group did you assign ______________ to in the beginning of the school year?

__top group out of ___ groups

__second group from top out of ___ groups

__third group from top out of ___ groups

__bottom group

__group not organized on ability but on (please explain basis for assignment): ____________________________

__no reading group, has reading in some other setting

Did you move ______________ to another reading group during the school year?

___ yes ___ no

If yes:
To which group? ______________________________________

Why did you move him/her? ____________________________

____

If ____________________ is in a reading group, how many children are in this group?

______

3. Which main reader or textbook did ______________ use this year?

______________________________ ___ ____________________

(title, e.g. Rainbows) (grade level) (publisher)

______ (date)

13. Are there any obstacles for you in communicating with ________________'s family?

___ yes ___ no

If yes:
Are these obstacles related to:

__language barrier __parent's schedule

__parental indifference __other (please explain):

____

14. If you have contacted ________________'s home this year, were the results:

__positive __negative __no effect

Please explain: ____

____

15. Has ____________________'s family ever contacted you about ________________?

___ yes ___ no

If yes:
What was the reason? ____

How did you feel about their getting in touch with you?

____

16. Do you know ________________'s family outside of having ____________ as a student in your class this year?

If yes:
How do you know them? (check as many as apply):

__grew up with parents __live in neighborhood

__taught other family members __belong to same church, social group, etc.

17. Overall, how would you characterize the contribution ____________'s family has made to ________________'s school achievement?

____

____

____

8. What do you consider ________________'s main strengths in reading right now?

____

____

______________'s main weaknesses in reading? ________

____

9. What reading-related activity does ______________ seem to enjoy the most?

____

10. If you assign homework to your class, does ____________ usually bring his/hers in on time?

___ yes ___ no

Do you think ________________ gets help at home on his/her homework?

___ yes ___ no

11. Have you contacted __________________'s family this year?

___ yes ___ no

If yes:
How did you contact them?

__phone call __note __knocked on door

About how many times in all have you contacted __________'s family this year?

_____

12. What do you usually contact _____________'s family about?

____

Is there a particular family member you usually talk to about ____________________?

___ yes ___ no

If yes:
Who is it?

__mother __father __grandparent __brother or sister

__other (please explain who):

____

22. How would you describe ______________ when he/she is doing independent work in class?

____

____

23. What does ______________ like to do when he/she has free time in class?

____

____

24. It's hard to predict with a child who's relatively young, but what final level of education do you expect ______________ to achieve?

__some high school

__high school graduate

__technical school or community college

__four year college

__graduate or professional school

25. If you have end-of-the-year standardized achievement test scores for ______________, could you please list them here?

______________ (name of test, e.g. Gates-McGinitie) ______ (month given) ______________ (subtest name, e.g. Vocabulary) ______ (grade* equivalent)

______________ (subtest name) ______ (grade)*

______________ (subtest name) ______ (grade)*

______________ (subtest name) ______ (grade)*

______________ (subtest name) ______ (grade)*

*grade equivalent scores are the ones we are interested in, for example 4.2 or 5.8.

Many thanks for providing this information. It will be an important part of the picture we are building up of each child participating in the project. If any questions are unclear or confusing to you, Lowry Hemphill (495-3521 or 666-1092) and Beverly Goldfield (495-3521 or 327-5251) can help.

18. How many days of school did ____________ miss as of June 1st this year?

___

19. Does ____________ have any language problems that you are aware of?

___ yes ___ no

If yes:
What do these consist of? ____________

____

Did you feel able to work with these problems yourself in the classroom this year?

___ yes ___ no

Was any outside help provided for this?

___ yes ___ no

What was the help? ____________

20. Does ____________ have any learning disabilities that you are aware of?

___ yes ___ no

If yes:
What do these consist of? ____________

____

Did you feel able to work with these problems yourself in the classroom this year?

___ yes ___ no

Was outside help provided for this?

___ yes ___ no

What was the help? ____________

21. How would you characterize ____________'s participation in whole class instruction?

____

____

School biography continued

Other test scores

test/form	date	score
1		
2		
3		
4		
5		
6		

Services

1

2

3

4

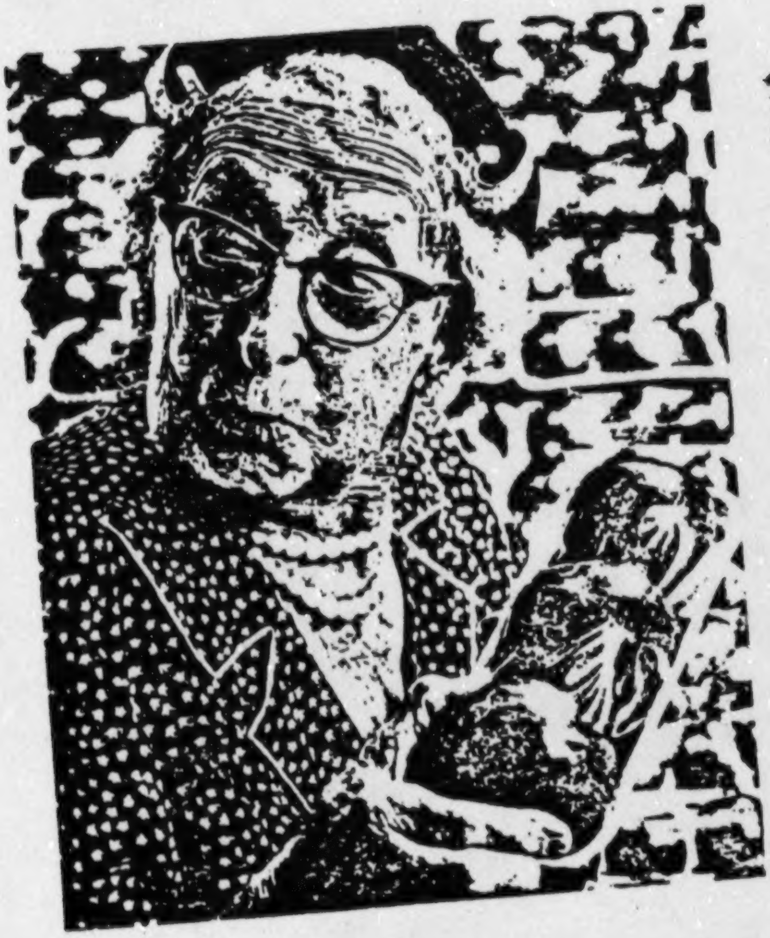
5

6

Other information

mulus #1

APPENDIX G: Narrative Stimulus



Here is a picture of a woman with some tomatoes. Look at the picture for a while and think about what is going on. When you have decided, write a story that tells what is happening in the picture and what is likely to happen next.

ENDIX H: Correlations between Home Factors and Literacy Measures

	Word Recognition				Reading Comprehension				Vocabulary				Word Production			
Family income (1=low)	.56+	.51+	.63+	.48*	.31	.53+	-.12	.36*	-.02	.27	-.28	.10	-.15	-.25	-.05	.02
Income per capita	-.05	-.30	.43	-.00	.16	-.04	.24	-.18	.26	-.06	.13	.14	-.42	-.45	.42	-.10
Rating of mother's literacy (1=non-reader)	.28	.41	.38	.32*	.11	.26	.63*	.31*	.21	.39	.33	.27+	-.37	.32	.70*	.17
Number of mother's favorite authors	.77	-	-	.69*	.70	-	-	.05	.77	-	-	.31	.18	-	-	-.20
Number of magazines read regularly	.56	-.82*	-	-.12	.17	-.59	-	-.11	-.22	-.27	-	-.29	-.22	-.02	-	.05
Level of newspaper read regularly (1=local, 5=national)	.53	.11	.87+	.40+	.33	-.23	.97*	.21	.75	.47	.97*	.56*	-.77+	.42	.80	.17
Number of favorite books as a child that mother remembers	.15	.53	.00	.36	-.21	.95	.46	.33	.50	.99*	-1.00**	.26	.95+	.88	.40	.24
Number of favorite authors as child	-	-	-	.81*	-	-	-	-.12	-	-	-	.24	-	-	-	.45
Rating of provision of literacy for child	-.17	.12	.52+	.18	.05	-.47+	.20	-.03	-.26	.24	.34	.14	.46+	.59*	.47	.36*
Number of books child owns	-.14	-.07	.17	-.03	.04	.04	.35	.31*	-.06	.09	.08	.05	-.33	-.03	.28	.29*
Frequency mother writes notes to child (1=infrequent)	.24	.06	-.70*	-.16	.81*	-.45	-.03	-.02	.50	-.13	-.33	-.21	-.74*	-.06	.08	.24
Mother's report: Age child learned to read (1=early)	-.75**	-.75**	-.40	-.58**	-.72*	-.59*	-.47	-.50**	-.25	-.59*	-.39	-.44**	.43	-.03	-.17	.02
Child's report: Age child learned to read (1=early)	.45	-.11	.39	.17	.18	-.20	.21	.05	.37	-.53*	.35	-.04	-.51*	-.02	.11	.06
Mother's report: Number of problems in first grade (1=fewer)	-.28	-.66*	-.36	-.29+	.35	.16	-.32	.24	.43	-.32	-.05	.15	.21	-.29	-.32	-.03
Mother's report: Number of problems learning to read (1=fewer)	.40	-.47+	-.31	-.28+	.26	.00	-.32	.02	.49+	-.68**	-.10	-.27+	.34	-.78**	-.66*	-.37*
Mother's report: Child's reading group in first grade (1=high)	-.21	.58*	.27	.26	-.28	-.18	.61+	-.06	-.44	.26	.45	-.04	-.09	.40	.05	-.20
Mother's report: Child had favorite books as a young child (1=no)	-.01	-.63+	.93	.01	.60	-.65*	.97+	-.22	.28	-.35	-.87	-.21	-.51	-.08	-.36	.06

+ = p < .10; * = p < .05; ** = p < .01; *** = p < .001.

	Word Recognition				Reading Comprehension				Vocabulary				Word Production			
Number of children in household younger than focal child	-.02	-.05	-.05	-.03	-.41	-.03	.19	.17	.09	-.14	-.12	-.03	.25	.39	.05	.35*
Birth order of child	.07	.37	.06	.10	.77**	.14	-.19	.12	.36	-.00	-.16	.00	-.50+	.30	.23	.26
Mother's education	.16	-.21	.87**	.45**	.03	-.66*	.12	-.05	.18	-.08	.36	.21	-.60*	.03	.21	-.13
Mother liked school as a child (1=little)	.05	.09	-.30	-.02	.39	-.24	-.50	-.15	-.05	.17	-.54	.03	.01	.15	-.91*	-.23
Mother's satisfaction with job	-.36	.28	-.42	-.08	-.48+	.20	-.10	.16	.41	.14	-.27	.19	-.18	-.46	-.05	.06
Mother's salary (1=low)	.67*	-.54	.00	-.04	.58+	-.69*	-.49	-.21	-.27	-.34	-.46	-.28	-.65+	-.36	-.77*	-.11
Mother's involvement in community activities (low score=low involvement)	.25	.80**	.46	.51**	.33	.26	-.02	.12	.30	.74**	.00	.42*	.40	.26	.05	-.04
Grade in school mother desires child to complete (1=low)	.15	.23	.72*	.41*	.39	.25	.05	.37*	-.29	.37	.24	.31*	-.00	-.15	.22	.12
Grade mother expects child to finish	.52	.33	.74**	.54**	.37	.06	-.13	.19	-.02	.53*	.13	.37*	.01	.18	.09	.17
Hours/school day with mother	-.24	.09	.32	.02	-.39	-.15	-.25	-.23	-.23	.08	-.11	-.09	.21	.08	-.28	.02
Hours/weekend day with mother	-.19	-.15	.05	-.08	-.43	-.21	-.21	-.19	-.28	-.07	-.19	-.11	.28	.27	-.05	.12
Frequency of play with siblings (1=little)	-.86**	-.70*	.60*	.32*	-.11	.23	-.10	.10	-.14	-.17	.24	.17	.12	-.25	-.46	-.28
Frequency of child's visits to relatives (1=less frequent)	.53*	-.02	.12	.18	.54*	-.29	-.15	.00	.33	.15	.46	.29+	.43+	-.18	-.04	-.11
Contact with extended family (1=no contact)	.70**	.36	-.31	.18	.45+	-.05	-.46	-.11	.26	.21	-.69*	.00	-.12	.58*	.00	.22
Number of friends (1=fewer than average)	.42	-.27	.17	.09	-.27	.00	.15	.22	-.23	.20	.14	.08	.24	-.16	-.11	.23
Frequency of play with other children (1=rarely)	.25	-.44	.13	.07	.19	.31	-.55+	-.09	.54*	.00	-.21	.13	-.05	-.27	-.42	-.20
Child's report: Frequency of activities with parents, other adults	.08	.50*	.09	.24+	-.18	.24	.11	.24+	-.32	.85**	-.07	.35*	-.10	.22	.02	.22
Mother's report: Frequency to parks, museums (1=rarely)	.16	.13	.17	.25+	.06	-.28	.27	.14	.70**	.38	.28	.54**	-.31	.65*	-.25	.09

continued. . .